TITLE OF THE INVENTION

GLOBOSE CONDUIT DOMAIN

This application is continuation of upright Inlet embodiments of Globose Embodiments domain Serial No:

10/156,192	05/28/2002 and is continuation of
10/074,966	02/13/2002 and is continuation of
09/850,927	05/08/2001 and is continuation of, claims benefits of
09/376,957	08/18/1999 and is continuation of, claims benefits of
10/742,485	12/19/2003 and is continuation of
10/190,993	07/08/2002 and is continuation of
09/850,927	05/08/2001 and is continuation of, claims benefits of
10/195,668	07/15/2002 and is continuation of
10/073,914	02/14/2002 and is continuation of
09/850,927	05/08/2001 and is continuation of, claims benefits of
09/376,957	08/18/1999 and is continuation of, claims benefits of
09/850,927	05/08/2001 and is continuation of, claims benefits of
60/231,514	09/09/2000 and claims benefits of
60/226,750	08/21/2000 and claims benefits of
60/220,358	07/24/2000 and claims benefits of
60/217,308	07/11/2000 and is continuation of
09/518,884	03/06/2000 and is continuation of, claims benefits of
60/123,153	03/06/1999 and claims benefits of
60/123,207	03/08/1999 and claims benefits of
60/123,504	03/09/1999 and is continuation of
09/376,957	08/18/1999 and is continuation of, claims benefits of
09/376,957	08/18/1999 which claims benefits of
60/123,153	03/06/1999 and claims benefits of
60/123,207	03/08/1999 and claims benefits of
60/123,504	03/09/1999 and is continuation of
08/950,898	10/15/1997, PAT 5,941,273

BACKGOUND OF THE INVENTION

Prior Applications references furnished by the Patent Office established no prior art extending into background of this invention.

Engineering and scientific community does not address a transporting medium and transported waste mixture best form of conduit mode. Round conduit shape is recognized as best mode form for a uniform and homogeneous fluid. A round conduit, fits any utilization, became acceptable uniformly.

Such simplification abounds with prominent exceptions. Drain traps, storm and sanitary sewers are among examples.

Adverse effect causes not apparent or recognized, waste fluid transport accepts maintenance as normal. Prior Applications, this Application is a new art.

A transported waste, fluid transport mixture medium can deviate from uniform directional impetus unless conduit wall confinement constitutes stringent controls. Often conduits function as two directional, three-dimensional structures. Sewers and drain traps are examples broadly implemented.

SUMMARY OF THE INVENTION

A generic globose spout, basin-outlet conduit, an upright tubular Inlet, and transitions bound domain. A globose, globose-inverse form includes inside or as integral parts an Inlet lower end and an outlet and constitutes said domain. A PAP segments locate upright plane align symmetric said domain forms and its parts lengthwise at least to a DCSS with a height through a springing line of said DCSS. Said domain embodiment basin-outlet ascending rounded spout lowest surface through a DCSS summit makes up a shrunken PPLD form. Said basin-outlet cross-sections constitute generic conduit globose, conduit shapes globose/conduit transitions of globose, globose-inverse domain.

A rounded conduit globose, globose-inverse spout of a shrunken PPLD S, S and or C unique form upright plane aligned turns through a PAP angle greater than ninety but less than one hundred eighty degrees. Properties of a linear angled leg of a PAP and a shrunken form of a PPLD define globose generic basin-outlet spout shape, which constitutes a cavity upper retention empirical volume of a fluid medium transporting waste. An entire cavity retains a quite smaller volume/mass than known drain traps. A significantly smaller mass lifted a shorter height and transported a shorter distance repeated indefinitely preserves a limitless magnitude of energy, of transporting medium mass. When required by suction, pressurized air, disinfecting fluid effect a self-flushing, disinfecting maintenance free action.

Said PPLD form slices into infinitesimal widths respective lengths wherein a width is a lowest horizontal segment of a rounded conduit cross-section perimeter wherein a width respective length reflects a cross-section shape, size. Widths and cross-sections respectively band into a conduit shape PPLD form, a basin specific lowest surface form, an outlet summit with a DCSS narrow, narrowest width of band. Two PAP intersections each at least a point constitute tangentially touching a PPLD width of band mid point, a First End or an End 2 undersurface. Former depicts a PPLD form slant, and latter positions a First End, or an End 2 respective undersurface width of band upright plane aligned symmetric. An about upright or

upright Inlet inflow consists of an End 1 upper end and End 2 lower end. A conduit basin-outlet spout consists of a globose basin and an ascending outlet spout from a First End into a summit, a DCSS form, and a descending outlet spout from said DCSS into an outlet Second End Exhaust. A First End or End 2 undersurface entire width of band is submerged under a merged basin-outlet cavity compact composite empirical volume upper retention having a merged compact composite retention free surface "at rest" extending to a height of said DCSS summit PPLD width of band. Foregoing globose, globose-inverse domain having upright or about upright Inlet embodiment parts. Assembling of a shape of parts into a configuration of a drain trap ultimate form includes an Inlet, a DCSS form, and a basin-outlet form FESD(s). An End 2 or a First End forms an undersurface inside rounded fillet unless it's a common surface part of a basin side. Particularly a lower Inlet, an outlet First End interfacing a respective First End, an End 2, a basin blind side, or a basin-outlet lower, lowest surface PPLD, a DCSS form FESD(s). Said globose, globose-inverse domain drain traps constitute a PAP, PPLD rounded spout conduit (PP) paths-of-passage through a short height, retention cavity figure of an empirical volume compact composite.

A spout conduit rounded perimeter lowest horizontal infinitesimal width with a horizontal surface length is a width of band with a fluid surface interface, and banded adjacent widths make up a width of band length of a PPLD. A linear PAP of a conduit globose embodiment having an upright or about upright Inlet extends from an Inlet lower end, an End 2, or a globose-inverse embodiment from a First End of an outlet. A PPLD forward slanted S, S and or C form is globose, globose-inverse embodiments respective side views shown as a line having width of band surface form of a conduit basin-outlet globose universe generic forms. Said S, C surface form height and length is highly reduced from current art drain traps. An End 2 or a First End width of band undersurface of banded adjacent widths radial lengths entirely submerged under fluid medium constitutes transport fluid waste

transported mixture volume equivalent of a simple trap empirical retention. Said empirical retention constituting a conduit basin-outlet upper cavity.

A basin, outlet, and Inlet retention free surface "at rest" is largely surface area geometrics composite of circle, ellipse and parabolic forms jointly an overlapping geometrics compact composite of an Inlet and a basin-outlet. A basin cavity upper retention is a low height form and contains an Inlet End 2 or a First End. Said form constitutes largely one of following four: an about centric spheroidal or spherical, a cylinder or a cylindroid remnant figure top, bottom horizontal plane truncated with its height, including an anti siphoning margin, less than 1.15 times largest dimension of an Inlet cross-section spanning retention free surface. Said conduit upper retention cavity extends into a lower retention cavity, makes general gradual narrowing transition of globose cross-sections, respective areas breach toward a First End. A PAP aligned PPLD forms a surface inflection about a First End and a PPLD lowest basin form. Said globose spout conduit basin cavity constitutes a directional turn greater than ninety degrees PAP upright plane symmetric. A spout outlet continues ascent of conduit basin-outlet cavity lowest surface forming a compact composite merged outlet retention PAP aligned symmetric. A narrowing breach about a First End constitutes cross-sections narrowing symmetric submerged area, with a centric largest segment PAP upright plane aligned. Said spout ascends from said First End. Said ascent ends with a summit's highest cross-section, discharge-cross-section-surface (DCSS), ending a PPLD with a width of band embodiment narrow or narrowest. Said DCSS lowest increment, summit inflection, completes a forward slanted S or S, C forms upper half. Outlet retention cavity is largely one of three shapes: a surface of revolution, an upright major axis elliptical, parabolic section forms. Ascending outlet spout retention merges a retention free surface truncated low height figure making an upper retention composite. An ascending spout of a basin-outlet conduit with a grade high, highest pitch makes a narrow or narrowest width of band of said PPLD forms with cross-sections lower surface narrow or narrowest. Conduit outlet spout

shape into a DCSS is upright major axis largely a form of following: round, rounded, ellipse, lower surface a parabola, oval with lower end narrower, composite flow-energy-surface-dispensator, FESD cross-sections areas extending into a descending outlet spout tubular outflow conduit. A conduit descending spout extends from a summit section into an outlet Second End rounded Exhaust cross-section with an industrial globose embodiment having a descending spout retention chamber. A Second End Exhaust, Inlet End 1 each includes one of following: hand coupling devices, flexible tubing splice welds, treaded devices hand or wrench secured to a drainage line. A threaded Second End Exhaust is contemplated.

A linear PAP and PPLD infinitesimal separation intersection is but a tangent location wherein a PAP line at least a point is not a common but tangent point to a PPLD infinitesimal width a band length symmetry point. Said linear PAP extends having similar infinitesimal intersection with a First End or an End 2 undersurface and an intersection with a line extending width of band radial length of a First End or an End 2 undersurface a PAP, PPLD upright plane aligned, symmetric. A PAP extends through an outlet PPLD symmetric and upright plane aligned intersecting a retention free surface and terminating with a DCSS or an outlet upper surface. A PAP surface tangency of a basin-outlet lower surface and a respective End 2, First End, a length made up of middle and end lengths with an upper length divided into a submerged length, a free space end. A PAP as a leg of an angle defines a basin-outlet conduit rotation with a directional change from the gravity direction with an angle smaller than 180, greater than ninety degrees. Except for an uppermost free space segment, a PAP is through a merged basin-outlet compact globose empirical upper retention "at rest", a basin-outlet conduit upper cavity, with a PAP upright and horizontal components of a low height, short respective length.

A PAP leg angle less than 180 degrees, said PAP PPLD tangency intersection relates to a PPLD form and its general slant. A descending outlet spout shapes extending from an outlet summit FESD end with a Second End Exhaust rounded

cross-section. PPLD widths of band shapes constitute an outlet spout ascending shape and its lower surface into a summit FESD. Except for FESD cross-sections forms and an extension of a PPLD from a summit into Exhaust cross-section, PAP and PPLD defines an outlet. A PPLD highest infinitesimal increment most distant from Inlet forms a horizontal inflection summit, a PPLD end a lowest increment of an upright DCSS, which ends an unobstructed PAP. Said PAP tangency with a First End or an End 2 and intersection with an undersurface extended radial width of band upright plane aligned and symmetric locates a counterpart PPLD width of band form of a basin lowest surface. A conduit basin lowest horizontal surface initiates a PPLD form and its slant. Its widths of band lengths are lowest segments of a basin cavity lower cross-sections perimeter and confirm a counterpart width of band radial lengths of a First End or an End 2 undersurface form. A First End, an End 2 undersurface PAP aligned width of band radial length cross-sections centric line PPLD form orthogonal constitutes a PAP, PPLD separation. A PPLD S or S, C form transverse infinitesimal width of band slices horizontal lengths each form a section perimeter lowest segment wherein banded lower perimeter adjacent slice make up a lower surface of a basin-outlet conduit, continued from a height of a respective PAP End 2, a First End. Said PAP End 2, First End cross-section area constitutes about matched basin cavity respective cross-sections lower areas defined by said centric segment orthogonal to a respective PPLD width of band contained by a basin lowest surface perimeter form. Said cross-sections perimeter PPLD width of band length, centric segment length, about sustains cross-sections area under, about, and around a respective PAP First End or an End 2. A basin cavity lower retention said centric segment is a short length from said PAP aligned undersurface width of band radial segment to a PPLD of a basin lowest surface. Said short length is a lower half of a conduit cavity PPLD S, S and or C form component highly shrunk when compared with such forms of other drain traps, for a given location sustained cross-section area a basin lowest surface PAP PPLD

about least separation. A globose globose-inverse embodiment PPLD S, S and C forms are highly shrunk in comparison with such forms of other drain traps.

A basin-outlet cavity low height figure of an upper retention lower surface confirms said spout conduit cavity lower surface form and a shape of a rounded basin blind side. An upper retention cavity figure and a retention free "at rest" surface form verify a basin-outlet spout cavity lower and upper retention form and a basin blind side surface shape and an embodiment basic configuration. A PAP locates and upright plane aligns symmetric an entire submerged width of band of one: a First End, an End 2 undersurface together with a counterpart PPLD form of a basin lowest surface, a PPLD shape, basin lowest surface shape, slant, a summit orthogonal DCSS. A PAP aligns a basin-outlet cavity compact composite figure upper retention "at rest" shape upright plane symmetric and generally an upper surface of a conduit basin-outlet, a descending spout shape, a Second End Exhaust section, said PAP End 2 or First End undersurface form respective upright Inlet or ascending spout. Advanced algorithm finite element computing defines shape of finite approaching infinitesimal surface areas. Advance algorithm computing of a retention shape modeled as a solid figure with interface friction among particles, surfaces and particles, as a shear stress identifies streamlined cross-sections areas and lengths to a DCSS. A model of various paths-of-passage (PP) lengths least sum modeling passageway shear stresses as they occur among particles and cross-sections surfaces streamlined for particles movement toward a DCSS configures a retention shape form and a trial configured embodiment ultimate form. Modeling techniques likewise contemplated include a surface shell best mode described.

A globose conduit spout cavity two and an industrial embodiment three tier retention free surfaces respective orthogonal cross-sections make up an Inlet, a basin-outlet, and an outlet cavity coordinated depths. An Inlet as first, a basin-outlet ascending spout and a DCSS as a second, and an industrial embodiment outlet descending spout as a third are cavity depth coordinated by retention "free" surfaces respective areas and heights. Said retained fluid free surfaces act as a

latent communicator among an Inlet, basin, outlet conduit spout cavities with a shape of DCSS FESD setting fluid depths. A height of said conduit cavities coordinated shape can identify a discharge particle passing with a fluid depth height through a FESD DCSS calibrated height settings wherein cross-section area form predetermines a DCSS cross-section submerged height component. Thus, a particle of certain size and specific gravity topside a PPLD toward a summit will pass based on a DCSS submerged height and area shape.

Two best mode embodiments are disclosed; one constitutes best construction simplicity, the other best mode of operation.

An upright or about upright Inlet embodiment of an upper end, End 1 and positively downwardly pitched a Second End including an outlet Second End Exhaust connect as an integral part of a draining line. Said Inlet and outlet include any positive connection with a draining line engagement system such as a flexible tubing, hand coupling devices, treaded devices hand or wrench tightened, splice welds among others.

Globose Embodiment domain of prior applications identifies Globose, Globose-Inverse, Globose upright plane Angled horizontal plane Oriented, Globose Inline, Globose Circumferential, Circumferential, and Globose Cylinder, Cylindroid of low height cylinder, cylindroid domain. Said domain not departing from invention Anti Sidelong, Anti Offset, Centric Anti Offset, Centric Offset, Offset Centric, Offset Sidelong, Sidelong Globose embodiments constitutes a basin-outlet respective Inlet various location upright plane aligned from an immediacy of an outlet toward a basin blind side. This Application continuation constitutes upright Inlet embodiments part of prior Applications of said domain herein depicted as a Centric, Offset, Sidelong globose, globose-inverse embodiments. Said domains including hybrids of Globose Circumferential, numerous Flush Apparatus, FESD, FESD managers, FESD SM variations belong to a Globose Embodiment Universe.

In said domain; a preferred drain trap is made up of a generic globose spout rounded conduit basin-outlet with upwardly extending an upright tubular Inlet. A

surface part of a blind basin side forms a common surface with a surface part of an Inlet lower end part. Said surface other part of said Inlet lower end is submerged inside a basin-outlet cavity empirical retention volume consisting of a transport medium with transported waste. A low height basin empirical retention largely a spherical figure centric part largely circular retention free surface merges with an outlet ascending spout low height figure empirical retention and other part of said free surface form. Said submerged Inlet lower part extends through said basin empirical retention forming Inlet largely circular retention free surface form and ends with a rounded Fine undersurface. Said empirical retention fills basin-outlet upper cavity extending upwardly from said Inlet undersurface highest width of band horizontal plane section through a basin largely globose figure near centric section and said respective basin-outlet conduit an ascending outlet spout lower part. Said Inlet, rounded conduit spout globose basin-outlet upright plane aligned turns by making a PAP angle of 105 degrees. A smooth PPLD S form extensively shrunken upper half height represents a conduit globose basin upper cavity largely a hemispherical by volume least height and most preferred section containing empirical retention. Basin-outlet basin upper cavity extends upwardly into a most preferred truncated centric low height remnant form made of a largely spherical or spheroidal figure. Said PAP angled leg forms said PPLD intersection and its basin-outlet S shape general slant, a basin-outlet conduit ascending outlet spout with a grade highest pitch of about fifty degrees. Said basin globose cavity lowest surface makes up a PPLD rounded lowest spot form. A height from said lowest spot to said PAP aligned undersurface width of band radial segment is a lower half of PPLD S form height approximating said conduit PAP turn. Said height constitutes cross-sections areas about sustained under, about, and around an End 2 and said areas about a least PAP PPLD separation. Said S form lower half height is significantly shrunk in comparison with such forms of other drain traps.

Said Inlet End 2 undersurface width of band radial surface length and counterpart PPLD width of band surface length form least areas gradually diminishing cross-

sections but of sufficient magnitude and a least PAP, PPLD orthogonal separation upright plane aligned and End 2 and basin lowest surfaces symmetric form FESD. A Fine rounded undersurface of End 2, said basin lowest surface PPLD rounded form (spot) extending into S form and outlet DCSS extending bidirectionally make up embodiment's respective FESD(s). Said DCSS FESD for this embodiment is depicted with many different shapes including elongated upright major axis oval with narrower lower end among other embodiment outlet FESD domain shown. Said rounded conduit globose basin-out gradual narrowing breadth and said PPLD S form smooth shape diminishing from either side of conduit cross-section into a smaller area, narrower section and PPLD width of band surface inflection outlet First End. Said basin-outlet rounded conduit ascending spout sands said smooth PPLD into conduit highest cross-section summit and horizontal surface inflection infinitesimal increment further a DCSS having basin-outlet PPLD PAP ending and PPLD downward extension to embodiment ending round Exhaust, Second End of outlet. Said ascending outlet spout gradually narrows cross-sections lower surface rounded sides breach and respective PPLD widths of band to DCSS, said conduit Inlet, basin-outlet globose spout making up a Sidelong embodiment.

Said domain another preferred embodiment having End 2 extend outwardly horizontally into basin continuing said FESD of End 2 undersurface, basin lowest surface counterparts width of band surfaces. Said End 2 outward extension form resembles "infant boot" and constitutes thickest Inlet part feathering around End 2 into said Inlet, basin common surface. A thickest part contains elongated around End 2 spout nozzles extending from undersurface to empirical retention topside. Said "infant boot" constitutes End 2 FESD alone and with nozzles. As Inlet wall merges into basin blind side said inner space ends with said common surface. Said Inlet contains double wall with narrow inner space extending around Inlet lower length part inside basin and an inner space lowest end with a downward short tube through a wall toward outside. A drip from said tube would constitute

an immediate sounding alert. This embodiment is from prior Applications and contains a Flush Apparatus another application continued.

Said domain another preferred embodiment shows includes a Ridge from inside Inlet and basin blind side surface inflection PAP upright plane aligned symmetric extends into said outlet with respective Ridge height sustained from lowest basin surface to outlet. Said height entering into outlet gradually decreases and soon ends with about horizontal Fine edge ending. Said Ridge section narrows with its upwardly rise ending with a Fine edge and ample height clearance from End 2 and with a shallower lengthwise curvature than its founded basin lowest surface and PPLD form on each side. From said Fine edge, Ridge sides slope downwardly into said PPLD smooth S forms on each side having increased Ridge section thickness and smooth rounded transition from sharply upward angled to a horizontal surface raised from one without a Ridge form. A Ridge of various location, shape, height, length and number is likewise contemplated. A Ridge modifies a breach of cross-section lower area sides to a fraction of such with no Ridge while section breadth remains unchanged, wherein conduit cross-section lower areas breach to length aspect is altered by at least a factor of two. Said two PPLD S forms widths of band are PAP upright plane symmetric and respectively about one half of width of previous embodiment having basin lowest surfaces rounded forms narrower ovals with said ovals narrower end toward outlet, constituting basin-outlet lowest surface FESD. Globose conduit lower surface at least two Ridges yields sufficient breach and a PPLD width of band construction flexibility but do not match that of a Trough. Ridges of various orientations are likewise contemplated.

This drain trap further includes a Fin shape extending from End 2 to basin upper casing PAP upright plane aligned symmetric from End 2 to a Fin tip about having outlet and retention free surface "at rest" thereabout. Said Fin shape forms a Fine edge smooth curve extending from End 2 "infant boot" toe to said tip then upwardly and slightly angled toward Inlet into basin upper casing. Said shape thin

lower end clears said elongated nozzles on either side, thickens with height, and feathers continually into rising rounded Inlet outside face. A Fin utilizes otherwise detrimental upper basin space as a FESD dividing upper basin sections breadth.

Said domain another preferred embodiment inside Inlet shape extends from said basin Ridge to said Inlet End 1 having a rounded apex sides surfaces which extend into inside fillets and feather into Inlet inner surface PAP upright plane aligned symmetric. Said embodiment includes branch Inlets tie-ins including one located about First End upright PAP plane aligned and symmetric. Said tie-in is addressed subsequently with branch Inlets and FESD SM[1]. Flush Apparatus Fin, Ridge and other Flush Apparatus parts are another Application continued.

Said domain another preferred Globose Sidelong Embodiment includes a Trough location, height, length which replaces prior embodiment Ridge providing a lower rounded surface modification with a highly specific lower cross-section area sides' breach and respective PPLD width of band. Troughs various locations shape, height, length and number is contemplated. Adjoining Troughs lengths are separated by a Ridge and conversely. A lower surface readily accepts a Trough without altering a cross-section breadth forming a lower surface FESD. This embodiment Fin includes said "infant boot" height, length and extends into a Fine edge typical shape described with prior apparatus and with enlarged cross-sections upwardly extending dome cavities forms lengthened curving about Inlet sides upper basin FESD.

Said domain another preferred Globose Dual Sidelong Embodiment and a Globose Sidelong Circumferential Embodiment hybrid extends a Ridge form upwardly through Inlet, basin and most of outlet as a thin wall Partition FESD manager which divides a drain trap into a two conduit apparatus. Said Partition and Ridge conduit basin-outlet makes up about same narrow breach of cross-sections lower area sides and raises lowest surface PPLD(s). Partition about

[1] Flow-energy-surface-dispensator, space-manager abbreviated.

hemispherical cutout topside basins lowest surface PPLD rounded form partially avoids said PPLD form at one end and extends toward basin blind side clearing said form other end. Said Partition divides cross-sections area breadth into two about equal parts upright plane aligned and basin-outlet lower surface PAP(s) PPLD(s) symmetry symmetric. A rounded Partition window cutout through said Inlet uppermost part allows full breadth of its Inlet cross-sections. Said Partition makes up said two conduit apparatus by including Inlet wall, "infant boot" End 2, and Fin as parts of Partition wall which ends with a Fine edge, extending through outlet from outlet descending spout PPLD extension diagonally to said Fin upper section. Said Globose Sidelong hybrids of Circumferential Embodiments constitute upright surface side view PAP linear with said PAP upright surface having a PPLD width of band. Flush Apparatus shown details is another Application continued.

Said domain another preferred Globose Dual Sidelong Embodiment and a Globose Sidelong Circumferential Embodiment Fig. 23 sectional view shows a FESD Partition manager with an elliptical Inlet Window from an End 1 to proximity of retention free surface "at rest" having rounded fine edge sill. A rounded Window is through Partition proximate basin-outlet lowest surface starting location of PPLD grade highest pitch with fillets around said opening toward upwardly direction from either side of Partition. A Partition curved ending edge extends downwardly from a sloping Fin fine edge and continues as a Ridge, ending with summit. Flush Apparatus details are another Application continued.

Said domain another preferred Globose Sidelong Embodiment shown by a cross-sectional view having an End 2 "boot" form side face and instep height extends from basin blind side into a cross-section gradual rise into summit. A "boot" undersurface and side face respectively side and top view shown constitute an S shape. Said undersurface gradually narrows its separation to PPLD from rounded lowest form to a rounded "boot" toe and extend End 2, basin lowest surface FESD for said "boot" length. An upper "boot" surface side view likewise

constitutes S form but about flattens into said toe and a short fillet radius feathers into Inlet outside face and upwardly into a Fin form. A Fine rounded Fin edge extends from said toe angled upwardly toward Inlet and to basin upper casing with sections increasing width feathering into Inlet outside face and said "boot". Said "boot" and upper, inner surface of doming basin blind side cavities on both sides of an Inlet make FESD(s), basin lowest PPLD surface rounded form, upper basin counterpart forms, respectively.

Said domain another preferred Globose Centric Offset Embodiment (10b) an upright Inlet lower end entirely submerged End 2 extends to basin blind side with a Bridging wall FESD makes inside fillet joints both ends and both sides of said wall symmetric and PAP upright plane aligned. Globose basin cavity makes a low height truncated centric spherical figure upper retention wherein free surface "at rest" is penetrated by rounded Inlet and said Bridging wall connected to basin constituting a Centric Offset classification. Said basin-outlet conduit spout basin, Inlet about centric slightly offset with ascending outlets spout cavity retention PAP angle of 110 degrees. Said Bridging wall forms a smooth outwardly curved line Fine edge lower end, enlarges in width and thickens as it rises, and passing upper retention feathers into Inlet outside face having basin blind side upper half dome casing. A doming basin casing and a Bridging wall form domed cavity on either side of Inlet. This embodiment's PPLD originates from an upper surface of an access portal Plug as a basin surface lowest area round form with height separation from and Inlet centric part offset by a lower surface into an ascending outlet spout said PPLD (7) and First End surface inflection. Said basin lowest surface and End 2 "infant boot" form a FESD. PPLD slanted S form centric length grade highest pitch shows angle of 50 degrees. Said portal is sealed with a gasket and provides access to entire basin, Inlet, and part of outlet. Depression on both sides of a Plug provides for a bar like handle.

Said domain another preferred Centric Offset Inlet embodiment double wall space lowest end drains through a basin Bridging wall short length tube to a weep

hole. Said portal plug upper surface includes a concave conical shape extends upwardly into Inlet as basins lowest surface counterpart FESD, matching a lower Inlet and an End 2 "infant boot". Said conical shape surface extension into basin lowest surface Inlet centric with inside annular circumference of a PPLD annular shape under "infant boot", is yet another profile viewed shrunk PPLD S form upright plane aligned PAP symmetric. Globose basin cavity makes a low height centric part of a truncated spherical figure as upper retention an Offset Inlet typical form. Said PPLD basin lowest surface shows annular valley entirely rounded sides. Said valley about basin blind extends into an upper basin surface half dome form and respective dome cavities. Said conical shape includes a major nozzle tie-in to an independent Flush Apparatus another continuation Application specified.

Said domain another preferred Centric Offset Embodiment (10b) basin lowest surface conical shape extends upwardly into Inlet from a basin pitched upwardly surface lowest surface rounded valley side into said basin blind side forming a PPLD crescent form as "infant boot", basin lowest surface FESD. Said conical shape concave surface Inlet none centric located closer to said basin blind side is PAP aligned upright plane symmetric. A conical shape PAP aligned and symmetric various basin, Inlet breach and inclinations extending into a basin lowest surface valley are contemplated.

Said domain another preferred Centric Offset embodiment constitutes a half gable roof shape slanted lower end curved about horizontal FESD SM extends into outlet. Said FESD SM cross-sections include said roof undersurface, topside, and on sides areas and air and transport fluid medium entrapment enclosure with a two way air release nozzle about uppermost roof surface. Said entrapment enclosure is supported of Inlet outside face PAP upright plane aligned symmetric, extends into basin-outlet, and uses an upper basin space, which otherwise is disadvantageous or detrimental. Said nozzle delays air egress from, entering into enclosure, delaying a transport fluid medium discharge from and entrance into said enclosure. Said assembly constitutes rounded edges structure.

Said domain another preferred Centric Offset embodiment constitutes said typical upper retention cavity, Fin, Bridging wall, "infant boot", and access portal plug conical form FESD(s) previously described. Said Fin enlarged form encloses an "infant boot", but hollowed out and undersurface removed passed its tip is an FESD SM another preferred air, transport fluid medium entrapment structure.

Said domain another preferred Centric Offset embodiment entrapment enclosure hip roof FESD SM is similarly located as previously described and having a roof section toward outlet summit with a smooth rounded cutout which resembles a dormer window. Another End 2 FESD form shows Inlet outside face toward basin blind side forming a fine pointed end.

Said domain another preferred Globose Centric Offset Embodiment entrapment enclosure FESD SM extends from Inlet outside diameter, clears an "infant boot", and as a half cylinder having a Fin shaped profile extends into outlet and basin-outlet upper surface. Said FESD SM enclosures two-way nozzle has a close to Inlet uppermost location. Said half cylinder shape faces summit with enclosure cylinder surface form cutout for full width from its Fin shaped profile tip to its base, with End 2 nozzles unobstructed view of outlet through said cutout.

Said domain yet another preferred, Globose Centric Embodiment forms a basin cavity Inlet centric constituting basin and Inlet respective retention free surfaces "at rest" about centric. Basin upper cavity retention largely a low height truncated spheroid centric part and End 2 flared undersurface width of band and basin lowest surface PPLD wide annular form and previously described conical shape are about centric. A PAP angle of about 127 degrees is increased from its previous 105 and 110 degrees. PPLD shrunken S form centric inflection surface of very short height constitutes ninety degrees angle. An oversized outlet spouts and upper basin counters siphoning action. Said basin upper space includes a disk form FESD angled toward outlet summit uppermost surface rounded curvature on sides matching separation of basin sides and lower end with a rectangular rounded

corners low height cutout. Said embodiment and disk are PAP symmetric upright plane aligned.

Said domain another preferred Globose Centric Offset Embodiment (10b) Inlet flared End 2 constitutes a basin upper retention cavity largely a low height truncated spheroid centric shape slanted upwardly from outlet as a slanted truncated cylinder form. Outlet ascending spout rounded lower surface is likewise extended upwardly along with said basin cylinder forming truncated basin-outlet merged cavity extending upwardly as largely ellipsoid surface extending into said basin largely cylindrical surface. Said ellipsoid to cylinder transition surface includes a surface portion of an intermediate size cylinder with rounded transitions among them. A cylindroid and intermediate cylinder merged surfaces composite is slanted S-form curved surface truncated from outlet summit extending into said upwardly slanted cylindrical form upwardly extending portion. A slanted surface is pitched upwardly from summit around said cylindroid, cylinder surfaces forms a channel about them which as one sided Trough, makes an enclosure about them extending upwardly as cylinder shape into basin-outlet upper casing. Said channel with lower surface a rounded side Trough shape about embodiment basin casing oversized outlet ascending and descending spouts avoids siphoning. This globose Centric Offset embodiment includes said globose retention shrunk PPLD S form with centric grade highest pitch of 62 degrees and slanted form PAP angle of 113 degrees aligned upright plane symmetric. PPLD ascending spout slant offsets annular valley PPLD form constituting a Centric Offset basin, Inlet alignment. Upwardly slanted surface from summit form an outlet FESD first, second, third sub-outlet with said Trough form providing an alternate path about basin-outlet. DCSS cross-section topside view shows said Partition, Ridge, Trough form around ascending basin-outlet and an outlet spout orthogonal cross-sections constituting outlet spout area as a basin-outlet globose form lower area said preferred channel alternate path about basin-outlet. Said view further shows a fillet flared End 2, a

rounded apex FESD and respective counterparts centric offset annular PPLD and valley sides.

Said domain another preferred Globose Centric Offset embodiment form includes a highly oversized outlet ascending spout elliptical major axis upright First End, a respective basin, and a descending spout narrowing into rounded Exhaust, which avoids siphoning action. Basin space includes said Disk FESD, basin-outlet PAP of 110, and respective shrunk PPLD grade highest pitch of 62 degrees and basin-outlet outlet grade pitch orthogonal cross-sections shows a preferred globose shape cross-section constituting a lower surface outlet spout as a Trough. Said preferred globose shape cross-sections are typical for outlet spout grade highest pitch constituting a spout conduit basin and outlet area cross-section.

Said domain yet another preferred Cylinders Centric Embodiment includes a rounded about upright basin and Inlet centric PAP PPLD upright plane aligned basin-outlet lower surface symmetric. An outlet FESD First Sub-outlet lowest surface forms rounded short radii outside fillet about and a rounded lowest surface narrow breach DCSS area part and PPLD short curvature into an outlet highest section summit. Said fillet constitutes ascending spout. Similar or shorter radii fillet forms a basin outside face outlet descending spout. Said summit rounded lower surface narrow breach is of a section height which is at least a low integer multiple of PPLD width of band. Said DCSS cross-section form topside and about basin casing from said breach makes a smooth counter curvature into low upwardly pitch slants toward a basin blind side constituting a large Second Sub-outlet curved surface part and unusually large a Third Sub-outlet slanted surface part. Embodiment basin's lower surface FESD includes a conical shape extending into Inlet as a FESD manager with a narrow width PPLD annular form. Said PPLD annular basin lowest surface wide shape S form curved lower part extends upwardly having a basin curved transition into upright surface toward said PPLD narrow width of band length through First Sub-outlet and summit as embodiment narrowest. Said PPLD length forms intersection with PAP which upright plane

aligns PPLD upright length with basin, Inlet lower surface symmetric. A channel with rounded lower surface resembling a Trough extends around upper basin pitched upwardly toward a basin blind side prior embodiment described with a lower end not at summit level but extended into an outlet oversized descending spout conduit toward Second End. Said channel other forms are embodiments contemplated. Said oversized outlet conduit descending spout extends to a vent line if needed for avoiding siphoning action. Said basin-outlet conduit spout shape constitutes upper retention cavity, Inlet, basin lowest PPLD surface about centric. Fine rounded End 2 and basin lowest surface are FESD respective counterparts.

Said largely cylindrical basin cavity shape empirical retention from its Inlet undersurface width of band highest radial segment a height to an outlet First Sub-outlet summit no greater than its Inlet inside diameter prevailing dimension is one requirement. An Inlet to a basin side breach no greater than one fourth of Inlet outside diameter is second. A conduit spout basin-outlet shrunken PPLD smooth S form upper curvature outlet spout cross-sections narrowest breadth respective width of band, and First Sub-outlet rounded sides and summit PPLD respective breadth and width of band narrow or narrowest are third. Said PAP respective PPLD, End 2 undersurface intersections with PAP angle less than 180 degrees is fourth. Large DCSS area and oversized outlet spout, a breach of Inlet to a basin side no greater than one-half and one quarter of Inlet outside diameter respectively for a Sidelong an Offset, Centric embodiments is fifth. Said requirements identify conduit basin-outlet cavity of a Globose Cylinder Centric embodiment.

Said domain another preferred Globose Cylinders Centric Embodiment Globose meets five requirements of basin-outlet upper cavity retention. Except for a basin lowest surface constituting a flat circular or a slightly doming surface wide width annular PPLD form, embodiment is prior embodiment identical. Shrunken PPLD S forms are a basin-outlet lowest surface least length from End 2 under facing outlet and basins lowest surface pitched downwardly toward outlet are

contemplated. Said DCSS FESD slanted channel Trough and particularly with a similarly pitched basin lowest surface qualify this embodiment into said globose domain. Breach to a Sidelong Lineage is contemplated previously described, also. Rounded End 2 undersurface and a rounded annular valley basin lowest surface entirely under respective said undersurface form are respective FESD counterpart surfaces and sustain cross-sections height and PAP PPLD separation under End 2. A portal Plug upper surface includes a conical shape upwardly extended into Inlet as basins lowest surface FESD, lower Inlet and End 2 counterpart. Said PAP angle of 148 degrees and PPLD S form centric segment length 90 degrees pitch PAP upright plane align symmetric basin-outlet. Said conical shape about basin lowest surface Inlet centric inside annular circumference of a PPLD annular shape under rounded End 2 is yet another profile viewed shrunk PPLD S form. Inlet double wall space lowest end previously described is provided with a short length drain tube through retention and into basin blind side outside face drip hole.

Said domain another preferred Globose Cylinders Centric embodiment satisfying said Globose basin-outlet upper cavity retention five requirements prior embodiment described and constituting a basin lowest surface flat, slightly doming PPLD circular surface or wide width annular form said shrunken PPLD S form are other rounded End 2 counterparts, respectively. Fine rounded End 2 and basin sides to lowest surface (30) are FESD respective counterparts. Shrunken PPLD S forms are a basin-outlet lowest surface least length from End 2 under facing outlet. Basins' lowest surface pitched downwardly toward outlet is contemplated. Breach from a Centric to a Sidelong Lineage is also contemplated, previously described. Said DCSS FESD slanted channel Trough and particularly with a similarly pitched basin lowest surface qualify this embodiment into said globose domain.

Said domain another preferred Globose Cylinders Centric embodiment satisfying said Globose basin-outlet upper cavity retention five requirements prior embodiment with conical form identified is enhanced with a cylinder basin, outlet outward spout First End from about an empirical retention mid height. Said outlet

spout lowers said PAP angle from 148 to 140 degrees. Otherwise embodiment is unchanged but First Sub-outlet, basin-outlet DCSS front view does show said spout lip thickness.

Said domain another preferred Globose Cylinders Centric embodiment satisfying said Globose basin-outlet upper cavity retention five requirements prior embodiments similar but enhanced with an outward ascending spout, an Inlet FESD manager, and FESD manager Flush Apparatus subsequently and further addressed with another continued Application. Extended as a basin conical form entirely sustaining a basin lowest surface valley rounded form space about a centric similarly rounded End 2 shape and extending said sustained space separation through empirical retention "at rest" height. Extended further upwardly said FESD manager gradually diminishes said space sustained change with height, to reverse abruptly said space volume change with a height of a rounded conical shape extending to an apex. Said space volume change reflects a depth and volume of an Inlet cavity and is coordinated with a basin-outlet cavity and volume coordinated with an outlet FESD DCSS shape and area. Said cavity depth volume surface retention settings having ability of predicting sized waste particles being discharged specific gravity introduction to embodiments further described.

Said domain yet another preferred Globose Cylinders Centric Embodiment outlet ascending Arching Spout includes a rounded End 2 and a basin lowest surface similarly rounded annular valley counterpart entirely under End 2. Basin and Arching Spout cavity empirical retention satisfy said five Globose Cylinders requirements. Said First End upper surface extending into upper casing constitutes a relatively narrow high basin. An outlet First End oversized upright elliptical cross-section curved spout into a rounded Exhaust of a Second End constitutes construction installation best mode and ease of fabrication. Said basin, elliptical First End into a DCSS downward spout into a round Second End Exhaust and increased height of basin-outlet upper cavity area constitutes a classification change from a large DCSS Globose Cylinders. Said Embodiment warrants an anti

siphoning action such as a First End large elliptical Arching Spout cavity retention and a DCSS various summit FESD are contemplated. Said PPLD profile shrunk S form consists of said annular valley rounded outer side lower S form curvature, a centric part very short upright length or a surface inflection only, and S form arching gradual slope change upper part. Said spout breadth and PPLD width of band remain unchanged into Second End Exhaust. Narrowing of said spout from a wider First End is likewise contemplated. A PAP (71) angle of 140 degrees establishes a slant of said S form. PAP tangency locations with rounded End 2 and PPLD width of band are introduction to embodiments described. This embodiment includes a conical shape (29) rising into Inlet beyond rounded End 2 as FESD from a basin valley similar rounded shape lower surface annular inner side and a Cap around a basin cylindrical lower end which provides portal access prior embodiments described. Breach (44) from Centric to Sidelong Lineage is contemplated including pitched basin lowest surface Fig. 35a shown. A double wall with narrow inner space extends around First End lower length part inside basin and an inner space lowest end with a downward short tube through a wall and a drip from said tube outlet constitutes an immediate sounding alert.

Said domain another preferred Globose Cylinders Centric Embodiment (10c) outlet ascending Arching Spout as with Cylinders Centric embodiment constitutes a basin lowest surface flat and slightly doming PPLD respective circular and wide width annular surfaces. Shrunk PPLD S form lower part rounded shape around said basin is matched by End 2 outside face fillet.

Said domain another preferred Globose Cylinders Centric Embodiment outlet ascending Arching Spout transfers into an Offset and Sidelong respective conical form Flush Apparatus major nozzle is subsequently addressed.

Said domain yet another preferred Globose-Inverse Cylinders Centric (10c') Embodiment constitutes a treaded Inlet opening enlarging into a cylindrical Inlet which extends into a basin cylinder. This embodiment includes a conical shape rising into First End from a basin valley rounded lower surface annular

inner side and a Cap handle and said valley rounded outer side around a basin cylindrical lower end providing a portal access previously described. A First End entirely submerged centric inside globose cylindrical upper cavity empirical retention ascends an outlet arching spout form penetrating through said Inlet, basin cylinder. Said arching spout basin length includes a double wall inner space prior embodiments Inlets utilized and thereto described. Gradual decreasing slope from said rising spout First End makes a summit and extends into a descending spout Second End Exhaust. Shrunk smooth briefly discontinuous and highly compacted short height and length S and C PPLD forms constitute conduit spout. Said S form upper curvature shape and lower curvature basin-outlet annular rounded valley widths of band under First End S form and very short C form make up lower PPLD shape profile. About centrically rounded First End and a valley rounded lower surface FESD counterparts about sustain surfaces respective separation and cross-sections area. Said embodiment conforms to requirements for globose cylindrical cavity empirical upper retention. Outlet spout cross-sections contains embodiment narrowest breadth and a PPLD width of band and a DCSS breadth and width of band narrow or narrowest. Said spout is shown of uniform sections. Elliptical sections major axis upright, various outlet FESD, and outlet cross-sections are contemplated preserving said breadth and PPLD width of band requirements. Such outlets are shown with embodiments previously described. Said PAP tangency with First End undersurface and PPLD width of band shows an angle of 131 degrees. From Centric to Sidelong Lineage Breach is contemplated including pitched basin Fig. 35a shown. A double wall with narrow inner space extends around First End lower length part inside basin and an inner space lowest end with a downward short tube through a wall toward outside. A drip from said tube outlet constitutes an immediate sounding alert.

Said domain another preferred Globose-Inverse Cylinders Centric (10c") Embodiment constitutes a basin lowest surface flat and slightly doming area respective circular and wide width annular surfaces of respective shrunk PPLD S

shape and rounded First End PPLD S and C counterparts is prior embodiment described. Shrunk PPLD S form lower part rounded shape around said basin is matched by First End outside face fillet.

Said domain another preferred Globose-Inverse Cylinders Centric (10c") Embodiment transfers into an Offset and Sidelong respective Cylindroid drain trap forms. A Breach change described previously transfers Lineage, Flush Apparatus included and other such shown with prior embodiments.

Said domain yet another preferred Globose Cylinders Centric Embodiment (11a) shows embodiment inside a drain line fitting together constituting a floor surface. A funnel like upper Inlet extends into a rounded Inlet with a flat End 2 undersurface and submerged centric inside a basin-outlet cavity empirical retention. Supported by a gasket on a blank flange of said drain line fitting Inlet End 1 grating is treaded into place utilizing said fitting inside tread. A basin-outlet bowl like form is hung from said Inlet constituting a generic form of basin-outlet spout having upper casing rim formed DCSS about basin outlet except for a basin upwardly extending blind side hanger and bracket extending about an Inlet outside face. Said bowl from a basin lowest surface forms a broad rounded surface said cylindrical basin sides and a PPLD smooth, shrunk S form outlet ascending spout, embodiment and spout ending narrowest width of band and rounded lower surface breach. Said bowl upper end extends upwardly from said summit making a rounded side view appearance constituting a First Sub-outlet extends horizontally a Second Sub-outlet and angling upwardly toward said hanger a Third Sub-outlet DCSS about Inlet. Basin lowest surface includes angular upwardly conical form extension with apex End 2 centric. Said conical form annular PPLD width of band and End 2 flat undersurface constituting respective counterparts.

Said domain preferred Globose Cylinders Centric Embodiment floor drain trap transfers into an Offset and Sidelong respective Cylindroid drain trap forms. Said transfer is as described for Globose Cylinder Centric Embodiments.

Said domain preferred Globose Cylinders Centric Embodiment floor drain trap transfers into an Offset and Sidelong respective Cylindroid drain trap forms. Said transfer is as described for Globose Cylinder Centric Embodiments.

A Globose Sidelong Offset Embodiment (10a) preferred FESD SM parts manage space of basin-outlet. Said parts make up a Nozzle assembly. A suction part constitutes an elongated intake orifice (prior and Child applications about End 2 similar), a curved elongated nozzle basin orifice and it's fillet with a basin upper surface. Said orifice to nozzle throat elongated nozzle topside about basin, an outlet orifice, and a spout nozzle and its rounded fillet with upper surface of an outlet descending and ascending spouts. Said basin and outlet orifice screens are of sufficient structural strength and are retained with a cover plate and a cover spiral screw, respectively. Said spiral screws tighten said plates and gasket with a quarter turn having a range of one turn. Said FESD SM further constitutes upper basin FESD Disk form extending across upper basin having centric lower end rounded cutout.

A preferred two directional (TD) FESD (10abc) reorients a basin cavity lower retention interface of a basin-outlet spout, Inlet conduit three directional surfaces into a conduit spout lower surface two directional surfaces. Said TD FESD extended upwardly constitutes a basin blind side and an Inlet upright vein Ridge depicted with an Offset and a Sidelong is suitable with Centric embodiments, also. A Ridge having a fine rounded edge downwardly slopes from both sides of an arching peak about a basin blind side. Following said basin perimeter and under, about an End 2 both ends of Ridge gradually negotiate a linear form from said circumferential path and fade into a Trough shape narrow breach and an ascending spout outlet cross-sections rounded lowest surface narrow or narrower breach about a First End. A Trough along Ridge and basin perimeter slopes, fades together with said Ridge, PAP upright plane symmetric. A centric Ridge of a narrow fine edge and sides rounded transition basin lower lowest surface having a downwardly decreasing slope ends within immediacy of or forms a basin rounded

PPLD or PPLD(s). Said Ridge may extend as basin or basin-outlet, or an Inlet Ridge. Said Ridges PAP upright plane aligned symmetric intersect wherein said centric Ridge edge widens near its peak about a top Trough rounded edge and arches along with said circumferential Ridge toward arching Ridges intersecting peak. Said top Trough constitutes an uppermost of a Trough set wherein its rim centric segment arc is under said circumferential Ridge and Trough. Said Ridges constitute a merging intersection of said widened sides and circumferential Ridge edge, forming a common arch and peak wherein differing slopes and peaks are contemplated, also. Said set of Troughs' sides constitute stair risers and sloping treads horizontally arching on either side of said centric Ridge upright plane PAP aligned symmetric. Risers interrupt continued surface areas and sequentially form a confining set of slanted and about upright surfaces and constitute a selected breach for each Trough. Said horizontal arches Troughs successively narrower breaches converge into a basin lowest surface PPLD form under an End 2 perimeter increment facing outlet with set of Trough ends forming said narrow fine centric Ridge edge. Said set of Troughs other ends fade into basin rising lower surface sides. Successive Troughs narrower breach, said treads centerlines merge into a narrow breach of a deepest Trough and a PAP upright plane symmetric start of a PPLD shrunken S form from an entire cross-section one Trough. A TD FESD flared End 2 narrowly increasing separation from said circumferential Ridge, Trough extends toward an outlet DCSS topside narrowed breach of a PPLD S form width of band counterpart segment initiating a PAP PPLD separation. Said risers constitute preferred square widows enclosing a nozzle orifices connected to a tie-in and directed toward arched riser opposite surface and a short path under End 2 with a preferred windows frame for various horizontal and upright direction range a various angled fit. Said lowest Troughs merge ending centric Ridge under Inlet wherein an extension of said centric Ridge into basin-outlet and Partition FESD manager is prior embodiments depicted. A set of Troughs' risers and treads arced, rounded, elliptical, and parabolic forms

about a basin blind align a PAP with a PPLD widths of band midpoint as purely globose and a widths of band having PAP upright plane as a Globose Circumferential Embodiment hybrid. Said TD FESD circumferential Ridge with Trough is contemplated without stack Troughs with or without a centric Ridge.

Said domain yet another preferred Globose Sidelong Offset Embodiment (10b) shows PAP upright plane aligned cross-sectional view a TD FESD SM basin orifice, a basin an outlet nozzle and a throat, and a basin an outlet orifice screen prior embodiment described. This Embodiment basin lower surface constitutes said TD FESD foregoing depicted; and a conduit spout outlet First End, a basin-outlet narrow width of band, and a shrunken PPLD S form ascending spout into a summit DCSS narrow or narrowest PPLD width of band. Said PPLD widths of band constitute a horizontal segment of a rounded lower surface perimeter having a respective breach. Said TD FESD includes preferred widows' square shape of nozzle orifices and a tie-in to a Flush Apparatus mainly another Application continued. A double wall inner space prior Figures depicted includes an Inlet outer wall, basin wall drip location. This embodiment without TD FESD SM with globose cross-sections extending through outlet summit forming a large globose upper area Sub-outlet three is likewise contemplated. TD FESD circumferential Ridge, Trough is planned without Troughs stack with or without a centric Ridge.

A Sidelong Embodiment (10a) upright plane aligned cross-sectional view of said TD FESD wherein embodiment circumferential Ridge starts from either side of Inlet basin, blind side common surface arching peak of said circumferential Trough and Ridge and extends under a Doming cavity. Said ridge arches into a common centric peak and extends under Doming cavity each side of said Inlet PAP symmetric. TD FESD and FESD SM are contemplated with other embodiments of said domain. Upper basin and outlet casing constitute orifices, nozzles and a throat, and a basin an outlet orifice screens of described FESD SM and includes basin lower surface said TD FESD. Conduit spout forms an outlet First End, a basin-outlet narrow width of band, and a shrunk PPLD S form

ascending spout into a summit DCSS narrow or narrowest PPLD width of band and PPLD widths of band horizontal segment rounded lower surface perimeter respective breach. Examples depicted TD FESD, FESD SM are other domain embodiments contemplated. Preferred widows square shape enclosure at least one nozzle having an unobstructed direction toward a Trough transition into circumferential Ridge arch about basin blind side of Sidelong and Sidelong Offset Embodiments. This embodiment without TD FESD SM with GC cross-sections extending through outlet summit forming a large globose form upper area Sub-outlet three is likewise contemplated. Said TD FESD circumferential Ridge with Trough is contemplated without stack Troughs with or without a centric Ridge.

A double wall inner space previously described includes an Inlet, basin wall drip location. Said nozzles include a Flush Apparatus tie-in, another Application continued.

Prior Applications generic claims are herein continued. Globose embodiment sides' narrow cross-sections breach, as a lowest surface rise constitutes an outlet First End with GC cross-sections of a basin-outlet, is first. A PAP inclination with two tangency locations as a directional, gravitational components of a conduit two directional aspects, second. A PPLD S form as a three-dimensional globose cavity shape form, a profile of a basin-outlet spout with a spout's grade highest pitch, slant, a PPLD width of band as a horizontal increment of a rounded lowest surface breach, third. A computing algorithm advanced model finite element (PP) paths-of-passage lengths least sum as a defining measure of Inlet, basin-outlet fit, fourth. Fifth generic claim is an inside perimeter shell form Globose-Conduit (GC) basin-outlet cross-section. Said five generic domain claims originate with the Original Specification and Drawings.

A GC section Original drawing Fig. 12 shown is a cross-section through basin circumferential Troughs on either side of basin and extending into upper casing.

The Communication Response Application 10/156,192 filed 09/23/2003, and 10/190,993 filed 06/24/2003 including Amendment One explain the granted Patent

positioning members' location variations and orientations includes a universe of drain traps. Various PAP alignments re respective Applications included are thus continued. Conduit continuation forms of said Patent drainage line likewise is of basin-outlet/globose-conduit (GC) cross-sections forms including an outlet FESD with a large Third Sub-outlet. Said Fig. 12 outlet from a three-dimensional large DCSS subdivides into three merging two-dimensional outlets, two of which are, said Troughs into a large two-directional upright major axis elliptical spout. Said GC cross-sections with Troughs cross-section constitutes a larger upper area than a basin cross-section lower area. Prior and Child Applications Fig. 89 herein Fig. 80 kidney shaped cross-section shows a conduit lower area, breach, and a larger upper globose form area. A globose GC cross-section constitutes a transition from a globose into a respective conduit form. A Globose Embodiment or a conduit form evolves depending on direction a conversion is going. Said circumferential Trough forms Ridge extends upwardly into a three-dimensional basin height Partition and Partition Window DCSS. A Trough, Ridge FESD and a Partition FESD manager relate to a Globose Embodiment respective conduit conversions, Original Application, its continuations, and herein described.

Said Patent drainage line constitutes an embodiment including globose-inverse and a preferred direction generic (GC) globose, conduit conversions. Said Patent drainage line, spacers as integral part of an embodiment, and flexible tubing ends preferred fabrication among others stated constitutes a suitable plastic PVC among other commercially viable under high temperature, pressure molded fabrication.

Applications, herein, Circumferential Ridge, Trough (34a) Fig. 51 is nearly identical, Fig. 57—63 very similar to said Original Application Fig. 12 Trough. TD FESD Fig. 75—79 Trough, Ridge inside basin is continuation of said Original and Child Application figures. Said TD FESD centric Ridge, Applications and herein, Fig. 7 and Fig. 8 and upwardly extended is a continuation of said Original Application Figure 9, outer veins 118.

Original Application said Fig. 12 is Fig. 2, an outlet angled region[2], continued Applications identified as Trough and Ridge and herein circumferential extending into said three-dimensional Partition and Window. Said outlet 30 region, second chamber18, and first 16 chamber[3] are herewith outlet, basin, and Inlet an optimum configuration.[4] The two chambers may be interrelated[5] with each other without being concentric and shapes attachments configurations are contemplated herein Sidelong, Offset, among others an End 2, basin lowest surface counterpart FESD shapes and means 110 controlling flow characteristics.

Said three outlets with two Troughs on cross-section sides merged into a large outlet from said DCSS form constitutes a globose into a conduit conversion Child and subsequent Applications continued as outlet FESD. Original Application said Fig. 1—2, Fig. 9, Fig. 12, and Fig. 10—11 show an upper retention height less than empirical retention allowed upper limit. Said Fig. 12 basin-outlet profile basin and Troughs cross-sections constitute a greater upper than lower area width. Branch inlet 12' is Child, Applications continued Flush Apparatus.

Original Application curving ascending spout outlets, Fig. 3—4, Fig. 7 and Fig. 5 as corrected by Provisional Application, extending from a globose basin retention cavity larger breach[5] constitute said basin-outlet GC cross-sections. Said Cylinder Centric basin and said Fig. 3—4 outlet satisfy[5] specified[5] retention cavity lower retention shape and empirical retention form, largest height requirement and constitute[5] continued Applications a respective Globose Cylindroid or a Cylinder Embodiment. Said basin and outlet of Fig. 7 satisfied[5] lower and upper retention cavity requirements constitutes continued Applications respective Globose-Inverse Cylindroid or Cylinder Embodiment. Said Original Application outlets and basins satisfying basin-outlet requirements of said Child Application continued matching

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[2] Original Application Page 8, Lines 7,8,
[3] Original Application Page 8, Lines 7, 10,
[4] Original Application Page 8 Line 17,
[5] Original Application Page 8 Lines 4-7 and Page 12 Line 17 and Page 7 Line 27.

constitutes respective Globose Centric or Globose-Inverse Centric[5], Sidelong, Offset, other related[5] including said Cylindroid, Cylinder related[5] Embodiments. Said Original Application Drawings and Specification constitutes Child and this Application FESD continuation wherein:

Child and continued Applications outlet, basin-outlet, End and counterpart basin lower surface, Trough, Ridge centric, circumferential, upright, Bridging wall, Doming cavity, and Fin FESD are Original Application respective. Said three-dimensional large DCSS of Fig. 12 subdivided into three, two-directional outlets[5] various configurations multiple outlets[5] is a merged into one large, upright major axis elliptical outlet. A multitude of two chambers shapes and as three, two-directional attachments configurations[5] inside basin-outlet within a large centric space of a globose basin. Particular application settings[5] means for controlling flow characteristics[5]. Flow control means shapes configurations[5], regions to direct debris. Means for controlling flow, applications flow control means shapes configurations[5] region shapes configuration to direct debris. Fig. 12 Ridge shapes configurations[5] region shapes configuration[5]. Outer Vanes, flow characteristics means[5]. Two chambers may comprise a multitude of shapes and attachment configurations[5]. Two chambers may comprise other configurations[5] and two chambers may be interrelated[5]. A multitude of two chambers shapes, comprise flow characteristics means, and may be interrelated[5].

Multitude of interrelated two-chamber shapes and attachments, configurations[5] are Child, continuation Applications FESD SM TD FESD SM addressing Original Application siphoning action.

Said circumferential Trough is two-directional region shapes configuration to direct debris[5]. Fig. 12 is an entire embodiment conversion into a two-directional outlet spout. Said circumferential TD FESD Trough Ridge inside a basin shape is

[5] Original Application Page 8 Lines 4-7and Page 12 Line 17 and Page 7 Line 27, Fig. 12.

Original Application Fig. 12 Trough Ridge embodiment transition toward a two-directional outlet descending spout conduit form.

Said basin lowest surface extending upwardly from an annular valley form into an Inlet or End 1 strainer basket FESD manager is Original Application multitude of interrelated two-chamber shapes and attachments configurations[5]. A Partition with its window is a two-directional FESD manager Original Application three-dimensional form Child and continued Applications introduced two-dimensional with said annular valley FESD managers constituting three-dimensional versions.

Said generic globose embodiment constitutes a three-dimensional embodiment spout transition toward a two-directional conduit.

Said PAP curved surface profile view shows linear, wherein PAP linear is its generic one-directional form. Counterpart generic PPLD S-shape uniform width of band two-directional form transfers into a three-dimensional varied width of band shape. PAP two-dimensions is reflected with said PAP PPLD intersection, PAP angle. A PPLD transition from a globose shape three-dimensional form toward a conduit form constitutes a generic globose conduit transition. Said paths-of-passage (PP) constitutes said inside perimeter shell form subdivided by a linear width having a respective globose to conduit form transfer length. Widths of band number about a perimeter reaching a springing line identifies basin-outlet lower surface confining breach therein sufficient for PP lengths sum evaluation. Said globose form transition surface starting section constitutes well-rounded perimeter or cylindrical form from an upper retention cavity globose shape with lowest horizontal segment, a PPLD width of band. Said shell transition surface starts with globose basin lower surface breadth narrowing, an S form lower curved portion rise, and terminates with said S form upper part approaching a conduit form lower surface nearing a horizontal pitch. A high or highest slope least length shell, with a slope gradual pitch change, is preferred. A shrunk smooth S form upright component of a PPLD S form constitutes a PAP angle counterpart.

Said interior perimeter surface shell transition shape area subdivided with orthogonal upright planes into finite strips of gradually diminishing cross-sections area constitutes least such area with well rounded perimeter from globose to a conduit form. Said least surface area having its centroid with a horizontal, upright component to summit. A vertical to a horizontal equalization requires an upright component multiplied by the gravity factor. Then, PP lengths sum constitutes centroid or said shell surface area center respective distance from summit wherein upright component is gravity multiplied for purposes of equalizing components lengths having PP lengths least sum.

A three-dimensional algorithm computing said surface area strips include third dimension depth, which subdivides entire cavity into cubes or spheres of specific gravities, sizes, shapes, each particle advanced computing modeled. Said PP least sum constitutes preferred embodiment transition surface from a globose to a conduit or from a conduit to a globose shape for a given embodiment designation.

Said shell transition surface well-rounded globose form upright section of an ascending basin-outlet spout constitutes an upright major axis elliptical appearance geometric form about First End returning to a rounded conduit form about S form uppermost part. An S form slanted length cross-section constitutes a GC section composite of a lower area rounded conduit form, a transition area from a conduit to globose form, with upper area globose form.

Said shell transition surface constitutes a basin-outlet spout conduit Inlet, basin or Inlet, basin-outlet transitions FESD, FESD manger, FESD SM surfaces. Noted such lower basin-outlet preferred surfaces constitute said rounded lowest surface preferred TD FESD, pitched annular valley crescent forms with counterpart End 2 FESD surface shapes, and a basin, an outlet FESD.

Functionally, fluid transport medium transported waste enters an End 1, passes through basin-outlet spout, discharges through a Second End Exhaust. Basin-outlet spout lower surface is conduit confining which transports fluid transported waste of high specific gravity. A FESD, FESD managers, FESD space managers, TD

FESD space manager, and TD FESD constitute preferred lower surfaces of a basin-outlet conduit shape continued from an Inlet conduit form. Said conduit shape upper enclosing surface counterpart Original Application "drainage line" forms rounded two-dimensional conduit or a three-dimensional globose shape. Said drainage line globose shape constitutes a rounded conduit lower surface with counterpart upper retention cavity, which traps an outlet or a FESD rounded lower surface with an upper surface enclosing counterpart composite of two or more cross-section areas or both, the Original Application Fig. 12 shown continued Applications continued.

Functionally, universe of said drainage lines experiences siphoning action with transport medium displacing upper retention cavity air. Basin-outlet linearly PAP aligned with a PAP angle less than 180 degrees constitutes a most likely siphoning action candidate. Said drainage line Application continuations constituting outlet FESD said lower surface form First Sub-outlet at least a composite elliptical cross-section major axis upright with other various said GC cross-sections constituting said transition from a conduit to a globose form. An outlet GC cross-section area sub-outlet constitute an anti siphoning shape along with a composite cross-section rounded lower surface area narrower breach conduit form.

Said conduit two directional cross-sections are defined inside a globose basin shape or constituting a globose shape multi two-directional cross-sections areas composite basin FESD. Yet another highly defined two directional form of basin cross-sections areas constitutes a FESD space manager nozzle. Said TD FESD space manager constitutes a basin-outlet two-directional conduit area form cross-section two directions a nozzle throat highly defined.

Functionally, under suction basin, basin-outlet said highly directional nozzle, nozzle throat area as basin highest and last cross-section areas under suction is a first two-directional area released from suction wherein fluid medium drops into a basin-outlet keeping and sustaining an End 2 submerged.

Prior Applications generic claim herein continued Globose Embodiment whose sides narrow breach of cross-sections shape, as a lowest surface rises toward a First End of a basin-outlet outlet. Said Applications show claimed versions of generic Globose Embodiment. Claimed generically PAP directional, gravitational component represent two directions with inclination of specific two locations of tangency. A PPLD S form reflects three-dimensional globose cavity retention form, a profile of a basin-outlet spout, a spout's grade highest pitch slant, a PPLD horizontal width of band increment of a rounded lowest surface confining breach. A computing algorithm advanced model finite element (PP) paths-of-passage lengths least sum constitutes a defining surfaces form of Inlet, basin-outlet. As a fifth generic claim is globose-conduit, basin-outlet transition GC cross-sections areas form. The stated five generic claims originate with the Original Application.

Said cross-section is from the Original Application Fig. 12 cross-section which orthogonal cross sections include a circumferential Trough section on basin sides.

The Communication Response Application 10/156,192 filed 09/23/2003, and 10/190,993 filed 06/24/2003 including Amendment One explain the granted Patent positioning members' location variations and orientations includes a universe of drain traps. Various PAP alignments re respective Applications continuations claimed are thus continued. Drainage line the Patent specifies is of different conduit forms Applications continuation basin-outlet (GC) globose-conduit cross-section frequently utilized form as an outlet FESD with a large Third Sub-outlet. Said Fig. 12 outlet as defined extends from a significantly larger discharge-cross-section of an upper or Third Sub-outlet. Fig. 1—2 descending spout is depicted by top, side section view as constituting an upright major axis elliptical form.

BEST MODES

Best mode constitutes the Original Application and granted Patent drainage line aligned by a linear PAP inclined at an angle less than 180 degrees and greater than 95. Said mode discloses said five generic claims including a PPLD shrunk S form. Said drainage line, as an Inlet, basin-outlet conduit lower surface constitutes a Sidelong Embodiment, other forms of less efficient modes. Said domain five generic claims by definition constitute a best mode. Said PAP, PPLD, PP, Globose form relate to the Patent positioning members, said drainage line shapes. PP, GC cross-sections relate to said members, shapes finite element computing algorithm derived cross-sections, previously described. Said drainage line Inlet extends into its basin blind side common surface fundamental form, a Sidelong Embodiment. A TD FESD among said End 2, basin lower surface counterparts is said drainage line basin-outlet lower surface preferred shape as an End 2 specific counterpart. Said TD FESD circumferential Trough, Ridge Original Application Fig. 12 is shown with several figures of continuation Applications. A TD FESD narrow breach is further narrowed with said centric Ridge. The Original Application Fig. 9 shows an Inlet, a globose form basin lower surface, and upright veins extending into PPLD lowest surface rounded form constituting a pair of centric Ridges one having respective basin blind side. A globose form basin, Inlet common surface extending upwardly into a half dome with dome cavities about Inlet sides is a preferred such surface. Said conduit Inlet globose basin form transition is a preferred form for said Patent drainage line. An upper basin surface among many shown continues as a basin-outlet conduit spout. Said drainage line, Globose Embodiments, PPLD lowest surface preferred rounded forms constituting a FESD End 2 counterparts includes Trough, Ridge, Partition, pitched annular valley.

Said transition surface shell from PPLD lowest surface form constitutes Original Application drainage line restrained by positioning member end confined, by Second End Exhaust. Said surface shell extends toward a summit as a conduit

form where siphoning is not a concern. Functionally, GC sections globose area three-dimensional confinement discharges large quantities of fluid wherein a lower section area two-directional confinement conduit, yet narrower Trough, assist passing of waste residue. GC cross-sections globose area portion resists siphoning, also. Said cross-sections Original Application Fig. 9 shown is shown through subsequent Applications and herein with several figures, including Fig 80 individually shown. Provisional Application 60/226750 08/21/00 describes outlet summit GC sections, a Trough, a Ridge substituting for said Trough section. Said GC upright major axis elliptical cross-sections with large DCCS Fig. 1—2, 9 Original Application shown and continued provide lower area narrow breach large upper area modest breath resisting siphoning, also. Functionally, empirical volume globose retention readily adds additional retention because of its near spherical form wherein a larger retention cavity resists siphoning of a cavity entire retention. Said FESD space manager, a TD space manager with a more robust and positive way acknowledge suction by maintaining an End 2 submerged without a release of drain line air into control environment. This constitutes an improvement to said Patent drainage line which experiences said suction wherein a cross-sections area nozzle, nozzle throat respectively incorporated into basin-outlet upper surface two-directionally constitutes suction, siphoning action, control. Said FESD, TD FESD then are natural continuation of said Patent. As depicted, a best mode Inlet End 1 and outlet Exhaust connect positively to a drainage line discharging waste fluid.

Functionally, a Partitioned Sidelong one half of Embodiment is with highest flow energy. Typical building codes may require a passage of a ball through drain trap wherein partitioned embodiment looses its primary advantage. Inlet, basin-outlet shown with a Flush Apparatus and access portal may cause waving of said requirement. Said domain Sidelong to an extent Sidelong Offset Embodiments meet said requirement. Said Sidelong is considered with a higher energy mode. A globose embodiment with GC sections three-dimensional Trough, Ridge make up a globose retention cavity with a continued conduit

rounded lower surface thus of a preferred shape. Applications continue Original Application Fig. 9 said three-dimensional Trough, Ridge. A simple rounded surface, circumferential Trough, Ridge is given preference. Shown TD FESD has its merits with multiple Troughs, with said centric Ridge. A Trough undercut by a lower Trough intersection along its surface is two dimensional, only. A finite element algorithm computing with PP extending from a basin blind side can verify a higher energy form. Advanced finite element computing algorithm substitutes for experimental verification.

Said centric Ridges various Fig. 8, 16, 62, Fig. 78—79 Flush Apparatus, among others another continuation Application describes, through a tie-in connect to a pressurized source of design fluid. A tie-in from a pressurized air bottle, such as used for propane gas, shut off by one-way check valve discharges into a basin-outlet whenever static inches of water pressure is less than a retention free surface "at rest" height. Such an embodiment uses compressed air available at gas stations as a part of transport medium. Fig. 78, Fig. 79 among similarly showed such tie-ins can likewise use disinfecting fluid under pressure. A probe with a simple float or solid state switch as a basin tie-in Fig. 12 shown, among commercially available controls, constitutes a part of a tie-in apparatus. A more robust TD FESD SM is preferred as a positive anti siphoning device, with or without self-Flushing Apparatus, with a preferred designated part air Flush Apparatus, with disinfecting as a substitute. Said ball test waved Sidelong, Partition constitutes highest energy among depicted embodiments FESD managers. Where siphoning action is a concern, outlet FESD, BC cross-sections are preferred. Considering fabrication aspects Fig. 67 embodiment constitutes preference having a high basin with large upright major axis First End, increased height upper cavity retention "at rest" Centric embodiment form are first steps of anti siphoning action, preferred as such measures, with said anti siphoning measures planned.

BRIEF DESCRIPTION OF DRAWINGS

The description and drawings merely explain and illustrate inventions. Invention are not limited to embodiments shown, as those skilled in the art who have a disclosure before them will be able to make modifications and variations therein without departing from the scope of the invention, with PPLD, grade highest pitch, figures shape, PAP about as shown.

Fig. 1 shows Embodiment (10a) scale schematic section;

Fig. 2 shows a simple drain trap scale schematic section;

Fig. 3 shows Globose Sidelong Embodiment (10a) section;

Fig. 4 shows Globose Sidelong, Embodiment (10a) section and Inlet End 2 "infant boot" (Flush Apparatus (10) is another Application continued);

Fig. 5 shows Fig. 3 Inlet basin Section A—A;

Fig. 6 shows Fig. 4 Inlet basin Section B—B;

Fig. 7 shows Globose Sidelong, Embodiment (10a) section, Inlet End 2 "infant boot", Fin, and basin Ridge FESD shape(s), (Flush apparatus (10) another Application continued);

Fig. 8 shows Globose Sidelong, Embodiment (10a), (Flush Apparatus another Application cont.;

Fig. 9 shows basin Ridge Section C—C of Fig. 7, C'—C' of Fig. 8;

Fig. 10 shows Fig. 8 Inlet basin Section B—B;

Fig. 11 shows Fig. 8 Inlet basin Section A—A;

Fig. 12 shows Globose Sidelong Embodiment (10a) section Inlet End 2 "infant boot" with Fin, and Trough FESD (Flush Apparatus (10) is another Application continued);

Fig. 13 shows a horizontal sectional View of Fig. 12;

Fig. 14 shows partial basin Section C—C of Trough;

Fig. 15 shows Section A—A of Inlet and part of basin;

Fig. 16 shows Globose Sidelong Embodiment (10a) section Inlet End 2 "infant boot", Fin, and Partition (Flush Apparatus (10) is another Application continued);

Fig. 17 shows Partition Section C—C of Fig. 16;

Fig. 18 shows a horizontal sectional View of Fig. 16;

Fig. 19, Fig. 20, Fig. 21 show Partition lower window Sections D'—D', D—D;

Fig. 22 shows Section A—A of Fig. 16 Inlet, partial basin;

Fig. 23 shows section of Globose Sidelong Embodiment (10a), Inlet End 2 "infant boot", Fin, and Partition (Flushing apparatus (10) is another Application continued);

Fig. 24 shows Partition Section C—C of Fig. 23;

Fig. 25 shows Section B—B Inlet, basin, Partition of Fig. 23;

Fig. 26 shows Section A—A Inlet, basin, Partition of Fig. 23;

Fig. 27 shows section of Globose Sidelong Embodiment (10a), Inlet End 2 "boot", Fin (Flush is Apparatus another application continued);

Fig 28 shows Section C—C of Fig. 27 "boot";

Fig. 29 shows Section A—A of Fig. 27;

Fig. 30 shows Section B—B of Fig. 27 Inlet, basin;

Fig. 31 shows Globose Centric Offset Embodiment (10b) section with Inlet End 2 "infant boot", basin Plug flat about doming lower surface;

Fig. 32 shows Bridging wall (101), Inlet partial section A—A of Fig. 31, Fig. 36;

Fig. 33 shows Bridging wall (101), Inlet partial section B—B of Fig. 31, Fig. 36;

Fig. 34 shows Bridging wall (101), Inlet partial sectional CC--CC of Fig. 31, Fig. 36;

Fig. 35 shows Globose Centric Offset Embodiment (10b) section with Inlet End 2 "infant boot", a Plug basin lower surface with valley (30), conical surface (29) (Flush apparatus (10) is another Application continued);

Fig. 35a shows Globose Centric Offset Embodiment (10b) section with Inlet End 2 "infant boot", Plug (104a) valley (30a) of a pitched basin lower surface, conical surface (29) offset (44) (Flush Apparatus is another Application continued);

Fig. 36 shows Globose Centric Offset Embodiment (10b) section with Inlet End 2 "infant boot", a Plug (104) basin lower surface valley (30) entirely under End 2 with conical surface (29), a half-gable roof FESD space manager (115a) (Flush Apparatus (10) is another Application continued);

Fig. 37 shows Globose Centric Offset Embodiment (10b) section with Inlet End 2 "infant boot", a Plug (104) pitched valley (30) of basin lower surface entirely under End 2 with conical surface (29) with Fin (53) (Flush Apparatus is another Application continued);

Fig. 38 shows Section CCC—CCC of Fig. 37 Inlet End 2, Bridging wall, Fin;

Fig. 39 shows Section C—C Fig. 37 Inlet End 2, Bridging wall, Fin;

Fig. 40 shows Section CC—CC of Fig. 37 Inlet End 2, Bridging wall, Fin;

Fig. 41 shows Globose Centric Offset Embodiment (10b) section with Inlet End 2 "infant boot", a Plug (104) with basin lower surface valley (30) entirely under End 2, conical surface (29), a heap roof FESD space manager (115b) (Flush Apparatus is another Application continued);

Fig. 42 shows front view A—A of FESD space manager of Fig. 41;

Fig. 43 shows Fig. 41 horizontal Section AA-AA through Inlet, basin-outlet;

Fig. 44 shows Fig. 41 view B—B of Inlet End 2 "infant boot";

Fig. 45 shows Section BB--BB of air nozzle (119), (54) shape;

Fig. 46 shows Globose Centric Offset Embodiment (10b) section Inlet End 2 "infant boot", a Plug (104) lower surface basin valley (30) entirely under End 2, conical surface (29), a half cylinder Enclosure (115c) FESD space manager (Flush Apparatus is another Application continued);

Fig. 47 shows Fig. 46 horizontal sectional view CCC-CCC;

Fig. 48 shows Section C—C of Fig. 46;

Fig. 49 shows Section C—C of Fig. 46;

Fig. 50 shows Globose Centric Embodiment (10c") section with Inlet End 2 flared, a Plug (104) with End 2 centric basin lower surface valley (30) conical surface (29), Inlet basin Breach (44) (Flush apparatus (10) is another Application continued);

Fig. 51 shows Offset Centric Embodiment (10b) section Inlet End 2 flared, a Cap (104) annular basin lower surface valley (30) entirely under End 2 conical surface (29), outlet FESD First (85), Second (86), Third (87) Sub-outlet (Flush Apparatus is another Application continued);

Fig. 52 shows topside view of Fig. 51;

Fig. 53 shows topside view of Fig. 54;

Fig.54 shows Offset Centric Embodiment (10b) section with Inlet End 2 flared, a Plug (104) with annular basin lower surface valley (30) entirely under End 2 conical surface (29), a disk FESD (115d), oversized outlet (Flush Apparatus is another Application continued);

Fig. 55 shows front view of Fig. 54 disk FESD;

Fig. 56 shows section of Plug (104) with FESD manager (115, 130), valley (30) of basin lower surface with similarly rounded End 2 (Flush Apparatus (10) is another Application continued);

Fig. 57 shows Globose Cylinders Centric Embodiment (10c) section outlet FESD with discharge channel (35a) about basin-outlet, a Cap (104) basin lower surface valley (30) conical shape (29).

Fig. 58 shows Globose Cylinders Centric Embodiment (10c) section outlet FESD with discharge channeled (35a) about basin-outlet, a Cap (104) basin lower surface flat to about domed shape.

Fig. 59 shows topside view of Fig. 57, Fig. 58;

Fig. 60 shows Fig. 57, Fig. 58 side view of outlet dispensator first (85), second sub-outlet (86);

Fig. 61 shows Globose Cylinders Centric Embodiment (10c) of Fig. 57 constituting an outlet ascending spout First End about mid height of Inlet submerged part;

Fig. 62 shows Globose Cylinders Centric Embodiment (10c) section having outlet FESD with discharge channeled (35a) about basin, a basin lower surface Plug (104) FESD manager (115) basin lower surface valley (30) with FESD (Flush Apparatus another application continued);

Fig. 63 shows top view of Fig. 62, and Fig. 61 with FESD manager removed;

Fig. 64 shows side view of Fig. 61, Fig. 62 first (85), and second (86) sub-outlet;

Fig. 65 shows Globose Cylinders Centric Embodiment (10c) section, Cap (104) with basin lower surface valley (30) conical shape (29), and Inlet basin Breach (44);

Fig. 66 shows Globose Cylinders Centric Embodiment (10c) section, Cap (104) basin lower surface flat about doming, and Inlet basin Breach (44);

Fig. 67 shows Globose Cylinders Centric Embodiment (10c) section Cap (104) basin lower surface (30) valley conical shape (29) (Flush Apparatus another application continued);

Fig. 68 shows topside view of Fig. 66 and Fig. 65, and Fig. 67 with conical form removed;

Fig. 69 shows Globose Cylinders-inverse Centric Embodiment (10c') section Cap (104) basin lower surface valley (30) conical shape (29), and Inlet basin Breach (44);

Fig. 70 shows Globose-inverse Cylinders Centric Embodiment (10c') section Cap (104) basin lower surface (111) flat or about doming, and Inlet basin Breach (44);

Fig. 71 shows topside view of Fig. 70 and Fig. 69 with conical shape removed;

Fig. 72 Globose-inverse Cylinders Centric Embodiment (10c') Flush Apparatus is another Application continued;

Fig. 73 formerly Fig. 76 shows topside view of Fig. 77;

Fig. 74 formerly Fig. 77 shows Globose-inverse Cylinders Centric Embodiment (11a) section inside drain line, with valley (30) conical shape (29), outlet FESD;

Fig. 75 shows Sidelong Offset Embodiment and TD FESD SM top view;

Fig. 76 shows View A—A top view of TD FESD;

Fig. 77 shows View B—B cross-section of Fig. 76 shown TD FESD;

Fig. 78 shows Sidelong Offset Embodiment with TD FESD and TD FESD SM, Flush Apparatus another Application continued;

Fig. 79 shows Fig. 78 Sidelong Offset as Sidelong Embodiment;

Fig. 80 formerly Fig. 89, originally Fig. 92 shown, cross-section area embodiment of a globose form kidney shaped.

Description and drawings explain, illustrate inventive concepts. Embodiments globose empirical retention cavity of conduit basin-outlet, paths-of-passage PAP, PPLD grades highest pitch, depict principles of inventions and those knowledgeable will possess information for constructing modifications and variations without departing from the inventive concepts. Disclosed forms as individual shapes illustratively show embodiments variations contemplated.

DETAILED DESCRIPTION OF THE DRAWINGS

Description and drawings explain, illustrate inventions. Embodiments paths-of-passage PAP, PPLD grades highest pitch of globose conduit spout depict principles of major inventions wherein those knowledgeable and seeing the drawings will possess information for constructing modifications and variations without departing from inventive concepts. Disclosed globose embodiment shapes exemplify individually illustrative show variations contemplated.

The enclosed drawings, PPLD designation are chilled Application disclosed and Figures other Applications continued are shown as subsequently described. Continuation of drawings from the original Application is claimed wherein the Patented granted constitutes a domain of embodiments. Said domain includes a rounded conduit various Inlets lower ends enclosed by a globose conduit spout enlarged form able of making a sharp turn and were original Application drawings numerous individual Figures illustrated, specifically globose and globose cylinder low height centric forms. Several original Application Figures are herein repeated with one shape change of one of many embodiment parts shown. The Applications 10/156,192 Communication Responses filed 09/23/2003, and 10/190,993 filed 06/24/2003 including Amendment One point out the granted Patent positioning members location variations and orientations include a universe of drain traps, and linear most direct PAP alignment Applications continuations preferred. The Patent drainage line likewise is of many different forms herewith a conduit spout lower surface matching most efficient round narrow breach lowest surface shape frequently FESD enhanced which includes an upper surface match. Referenced Responses address Specifications and stating drawings' continuation is as herein indicates. Said Drawings continuations are most apparent with informalities Specifications addressed which are clearly continuations from original Application and the Patent granted. Said Patent positioning members location, positioning, orientation and drain line conduit selection is Figure 1 and Figure 2 depicted, former a Globose Sidelong Embodiment latter referred to as Simple Trap. Inlet,

basin-outlet alignment and direction angular change is PAP angle defined former showing 108 and latter 180 degrees. Said positioning members alignment shows said former significantly shrunk basin-out PPLD S form compared to latter, confirmed by said PAP angles and lengths of PPLD forms. Both apparatus are shown about to scale with Simple Trap actually bulkier due to its construction joints. Both make a basin-outlet smooth, rounded, lower surface, efficient area cross-section with PPLD grade, grade pitch gradual change through basin-outlet. Apparatus basin-outlets are positioned with significantly different PAP and empirical retention mass conduit cavity shapes, with former accommodated by a low height and short length basin-outlet globose compact shape. FESD(s) enhanced embodiments globose cross-sections rounded areas lower and upper surfaces and are claimed with other drain traps such as Simple Trap.

Embodiment members, elements like structures are drawing reference numbered alike, wherein letter subscripts depict further delineation. Particular style globose embodiments drain trap apparatus depicted are Globose Sidelong (10a), Offset (10b), Centric (10c), (10c"), Globose-inverse Centric (10c'), Globose floor drain trap Centric (11a). These are further subdivided. Figure 3 through Figure 30 show Globose Sidelong preferred embodiment. Drain trap apparatus Fig. 3 is illustrated with understanding other globose sidelong apparatus structure and operation is similar. A Figure specific detail shown is described as such.

The domain consists of embodiments constituted with following:

Fluid Inlet (13) upper end is designated as an End 1 (38) with lower end as End 2 (40). End 1 includes fitting 188, which connects with a sink strainer basket, a basin, a tub or similar structure. Fitting (188) connects fully attached and tightened by hands. Embodiments wrench tightened fittings are likewise contemplated.

A basin, outlet, and Inlet retention free surface "at rest" is largely surface area geometrics composite of circle, ellipse and parabolic forms jointly an overlapping geometrics compact composite of an Inlet and a basin-outlet. A basin cavity upper

retention is a low height form, and contains a submerged Inlet End 2 or an outlet First End. Said form is largely one of following four: an about centric spheroidal or spherical, a cylinder or cylindroid remnant figure top and bottom horizontal plane truncated and an anti siphoning height included a cavity height less than 1.15 times Inlet outside face retention free surface "at rest" cross-section largest dimension. A PAP, PPLD upright plane aligned conduit cavity upper retention extends into a cavity lower retention, makes general gradual narrowing of globose cross-sections respective areas breach about an outlet First End and forms a PPLD and a lowest surface inflection of an outlet First End. Said globose spout conduit basin cavity implements directional turn greater than ninety degrees PAP upright plane aligned symmetric. An outlet spout continues a lowest surface ascent of conduit basin-outlet cavity forming a compact composite merged outlet retention PAP aligned symmetric. A narrowing breach about a First End constitutes cross-sections areas smaller submerged symmetric area with a largest middle segment PAP upright plane aligned. Said outlet spout ascends from said First End toward a conduit highest cross-section. Said spout ascent ends with a summit's highest cross-section, an outlet discharge-cross-section-surface (DCSS), and a PPLD width of band narrow or narrowest. Said lowest surface inflection summit completes a PPLD forward slanted S or C forms upper half. Outlet cavity retention is largely one of three curved shapes: a surface of revolution, an upright major axis elliptical, parabolic section forms. Ascending outlet spout retention merges a spout retention free surface truncated low height figure and makes an upper retention composite. An outlet spout of a basin-outlet conduit ascending grade high and highest pitch makes a narrow or narrowest width of band of said PPLD forms and narrow or narrowest breadths of cross-sections. An ascending conduit spout shape into a DCSS is upright major axis largely a form of following: round, rounded, ellipse, parabola, oval with lower end narrower, composite flow-energy-surface-dispensator FESD cross-sections areas extending into a descending outlet spout tubular outflow conduit. A PPLD, and a PAP defines lowest surface

horizontal inflection summit infinitesimal increment most distant from an Inlet and a PPLD ending an orthogonal DCSS ending a PAP. A descending conduit spout extends from a summit DCSS into a Second End Exhaust rounded cross-section of an outlet. An outlet Second End Exhaust one of following: flexible tubing, hand coupling devices, splice welds and or treaded devices hand or wrench secure tightened and with threaded Second End, Exhaust likewise contemplated connects to a drainage line.

Fluid outlet (12) is shown comprising lower end as First End (83), highest flow-through cross-section summit's infinitesimal increment farthest from an Inlet as discharge-cross-section surface (84). A PPLD and a lowest surface inflection delineate generally an outlet First End (83) from a basin-outlet retention (18). An Exhaust (384) having outlet Second End (14) is associated with a waste line or service line, or alike.

In said domain; a preferred drain trap of Fig. 3 is made up of a generic globose spout rounded conduit basin-outlet with upwardly extending upright tubular Inlet (13). A surface part of a blind basin side (80) forms a common surface with a surface part of an Inlet lower end part. Said lower end of Inlet other part is submerged inside a basin-outlet cavity containing an empirical retention volume consisting of a fluid transport medium with transported waste. A low height basin (18) empirical retention largely a spherical figure part largely circular retention free surface merges with an outlet (12) ascending spout said free surface other part largely an elliptical form of a low height figure empirical retention. Said Inlet lower part extends through said basin empirical retention, forms largely circular retention free surface form, and ends with a rounded Fine undersurface (40). Said empirical retention fills basin-outlet upper cavity extending upwardly from said Inlet undersurface highest width of band horizontal plane section to a largely globose figure near centric section retention free surface "at rest" and fills said basin-outlet conduit an ascending outlet spout cavity lower part. Shown Inlet and said rounded conduit spout globose basin-outlet direction turns making a PAP

angle (71) of 105 degrees upright plane aligned. A smooth PPLD (7) S form extensively shrunken upper half height represents a conduit globose basin upper cavity largely a hemispherical by volume least height and most preferred section containing said empirical retention. Basin-outlet basin upper cavity extends upwardly into a most preferred truncated centric low height remnant form made of a largely spherical or spheroidal figure. Said PAP angled leg forms said PPLD intersection and its basin-outlet S shape general slant, a basin-outlet conduit ascending outlet spout with a grade highest pitch of about fifty degrees (47). Said basin globose cavity lowest surface makes up a PPLD rounded lowest spot form (89). A height from said lowest spot to said PAP aligned undersurface width of band radial segment is a lower half of PPLD S form height formed by said conduit PAP turn. Said height (17) (88) constitutes cross-sections areas about sustained under about around an End 2 and said areas an about least PAP PPLD separation. Said S form lower half height is significantly shrunk and slanted when compared with such forms of other drain traps. Said Inlet End 2 undersurface widths of band radial lengths and counterpart PPLD width of band surface form least areas cross-sections gradually diminishing but of sufficient magnitude with an about least PAP PPLD orthogonal separation upright plane aligned End 2 and basin lowest surfaces FESD symmetric surfaces form. A Fine rounded undersurface of End 2, said basin lowest surface PPLD rounded form (spot) extending into S form are symbolic and make up this embodiment's respective FESD. Said DCSS FESD for this embodiment is other embodiments depicted with many different shapes including elongated upright major axis oval with narrower lower end among other embodiment outlet FESD domain shown. Said smooth shape PPLD S form and rounded conduit globose basin-out gradual narrowing breadth cross-sections diminish from either side of conduit cross-sections into a smaller area, narrower section and PPLD width of band surface inflection outlet First End (83). Said basin-outlet rounded conduit spout ascents from said smooth PPLD First End counter flexure surface inflection into conduit highest cross-section (84) summit

and a horizontal surface inflection infinitesimal increment further a DCSS having basin-outlet PPLD PAP ends. Said ascending outlet spout First End (83) below a height of said Inlet End 2 gradually narrows cross-sections breaths, respective lower surface rounded sides' breach and respective PPLD widths of band to DCSS. A PPLD downward extension with outlet descending spout ends with round Exhaust (384) Second End (14) of outlet. Said conduit Inlet, basin-outlet globose spout making up a Sidelong Embodiment.

Said End 2 (40) FESD is positioned as basin lower surface counterpart having said End 2 (40) curved (75) toward and into said basin blind side about or below said inflection point (80). Said End 2 toward outlet is curved (73) upwardly (this figure) for said End 2 having into basin curved upwardly perimeter flow-through cross-section area. Said basin upper surface half-arch (51), dome cavity (50) form on Inlet sides as said basin upper surface FESD. Said basin lower surface FESD rounded shaped surface (90) from said Inlet, basin common (80) surface inflection about basin blind side to said First End surface inflection counter flexure makes a rounded low spot (89) under said End 2 having said about least separation (88).

Fig 3 shows said lowest spot form about round wherein a distinguishable oval PPLD shaped form with longer axis symmetry toward an outlet upright plane aligned reflecting similar basin shaped is planned.

Foregoing addressed efficient range of rounded conduit shape, wherein apparatus having higher basin-outlet lower surface is with higher potential energy. Thus an apparatus, herewith, use a basin shape of *fast-rising curved surfaces*. As not to shelter or differentiate a location from an entire basin one cavity retention mass a basic transition shape is of *round*, or *rounded surface transition* form basin lower surface into *fast-rising* surfaces FESD assisted. A Globose Sidelong (10a) embodiment as well as other drain trap apparatus is formed numerous ways and from many different materials. For example, said drain trap apparatus one may fabricate from a molded plastic material, however, a metal or alloy-based material and various composite materials are likewise contemplated.

Depicted Fig. 3 introduces a basic sidelong embodiment skeleton wherein globose generic structure surface, line geometrics respective trap apparatus generic parts and shapes, are not repeatedly depicted avoiding repetition.

A basin lowest surface PPLD various shape(s) is distinguishing characteristic among globose embodiments as basin lower surface Inlet End 2 counterpart with PPLD constituting lowest surface.

Said empirical retention constitutes a basin-outlet, Inlet cavity topside a respective First End, End 2 undersurface highest width of band horizontal plane to a retention "at rest" free surface, a volume equivalent to a height of two inside diameters of embodiment globose-inverse outlet, globose Inlet, submerged end.

Fig. 5 is a sectional View A—A showing rounded Inlet, rounded basin truncated from its outlet, and said dome cavities (50) on both sides of said Inlet.

Said domain another Globose Sidelong preferred embodiment is Fig. 4 depicted having End 2 extend outwardly horizontally into basin continuing said FESD of End 2 undersurface, basin lowest surface counterparts width of band surfaces. Said End 2 (40) outward extension form resembles "infant boot" and constitutes thickest Inlet part feathering around End 2 into said Inlet and basin common surface. Said thickest part contains elongated spout nozzles (54) pointed at retention surface well into said outlet extending around a rounded End 2 and toe (545) rim from undersurface outside fillet wide breach into a cone shaped section profile truncated into a nozzle rounded upper fillet elongated small orifice. Said "infant boot" constitutes End 2 FESD alone and with nozzles. As Inlet merges into basin blind side, said inner space ends with said common surface. Said Inlet contains double wall (118) with narrow inner space extending around Inlet lower length part inside basin and an inner space lowest end with a downward short tube through a wall toward outside. A drip from said tube would constitute immediate sounding alert. This embodiment's Framework is depicted with one Fig. 3 shows and contains prior Applications Flush Apparatus another Application continued.

Fig. 6 is a sectional View B—B showing rounded Inlet, rounded basin truncated from its outlet, said dome cavities (50) on both sides of said Inlet and Inlet double wall space (118).

Said domain another preferred embodiment Fig. 7 shows includes a Ridge (55) from inside Inlet and basin blind side surface inflection (80) PAP upright plane aligned symmetric extends into said outlet with respective Ridge height sustained from lowest basin surface to outlet. Said height entering into outlet gradually decreases and soon ends with about horizontal Fine edge ending. Said Ridge section narrows with its upwardly rise ending with a Fine edge and ample height clearance from End 2 and with a shallower lengthwise curvature than its founded basin lowest surface and PPLD form on each side. From said Fine edge, Ridge sides slope downwardly into said PPLD smooth S forms on each side having increased Ridge section thickness and smooth rounded transition from sharply upward angled to a horizontal surface. A Ridge of various location, shape, height, length and number is likewise contemplated. A Ridge modifies a breach of cross-section lower area sides to a fraction of such with no Ridge while section breadth remains unchanged, wherein conduit cross-section lower areas breach to length aspect is altered by at least a factor of two. Said two PPLD S forms (7) widths of band are PAP upright plane symmetric and are respectively about one half of a previous embodiment having basin lowest surfaces rounded forms narrower ovals with said ovals narrower end toward outlet constituting basin-outlet lowest surface FESD. Globose conduit lower surface at least two Ridges yields sufficient breach and a PPLD width of band construction flexibility but do not match that of a Trough. Ridges of various orientations are likewise contemplated.

This drain trap further includes a Fin (53) shape extending from End 2 to basin upper casing PAP upright plane aligned symmetric from End 2 to a Fin tip (60) about having outlet and retention free surface "at rest" thereabout. Said Fin shape forms a Fine edge smooth curve (260) extending from End 2 "infant boot"

toe to said tip then upwardly and slightly angled toward Inlet into basin upper casing. Said shape thin lower end (53) clears said elongated nozzles (54) on either side, thickens with height (53) and feathers continually into rising rounded Inlet outside face. A Fin utilizes otherwise detrimental upper basin space as a FESD dividing upper basin sections breadth. Globose Sidelong Apparatus Framework is as described with prior embodiments and herewith modified.

Said domain another Globose Sidelong preferred embodiment constitutes prior Apparatus described basin Ridge (317) extending upwardly to Inlet End 1 having a rounded apex sides surfaces which extend into inside fillets and feather into Inlet inner surface PAP upright plane aligned symmetric. Said embodiment includes branch Inlets tie-ins including one (304) (307) located about First End upright PAP plane aligned and symmetric. Said tie-in is addressed subsequently with branch Inlets and FESD SM. Embodiment's Framework Fig. 8 shows is depicted with Fig. 7, Fig 4, and Fig. 3 described, modified herewith contains prior Applications Ridge, Fin Flush Apparatus and other Flush Apparatus parts another Application continued.

Fig. 9 Section C'—C' shows cross-sectional view through said Ridge of embodiment which Fig. 7 shows. Said Ridge upwardly extension from rounded valleys PPLD width of band (7) on either side forms converging surfaces into a fine rounded edge apex. Fig. 9 Section C—C is another Application continued.

Fig. 10 shows cross-sectional view of lower Inlet, basin, a Fin, Doming cavity on either side of said Inlet with a double wall construction, End 2 "infant boot" with elongated nozzles, are embodiments basic FESD(s), frequently used.

Fig. 11 shows a basin about uppermost cross-sectional view of embodiment parts Fig. 10 listed. Flush Apparatus parts are another Application continued.

Said domain another preferred Globose Sidelong Embodiment is Fig. 12 shown. Said embodiment implements two changes into embodiment Fig. 7, Fig. 8 show. First, a Trough (31) of location, height, length replaces Ridge providing a lower rounded surface modification with a highly specific lower cross-section area

sides' breach and respective PPLD width of band. A Trough of various locations, shape, height, length and number is contemplated wherein adjoining Troughs are separated by a formed Ridge and conversely. A lower surface readily accepts a Trough without altering a cross-section breadth forming a lower surface FESD. Second, said embodiment Fin includes said "infant boot" (41) height, length and extends into a Fine edge typical shape described with prior apparatus and with enlarged cross-sections upwardly extending dome cavities forms lengthened curving about Inlet sides upper basin FESD. Flushing Apparatus parts are another Application continued.

Fig. 13 shows embodiment parts Fig. 12 depicted and a springing line cross-sectional view of basin-outlet. Another Application depicts Flush Apparatus.

Fig. 14 shows cross-sectional view of Fig. 12 basin lowest surface Trough.

Fig. 15 basin about uppermost cross-sectional view shows a basin part about Inlet and previously listed parts including dome cavity on Inlet either side.

Said domain another preferred Globose Dual Sidelong Embodiment and a Globose Sidelong Circumferential Embodiment Fig. 16 shown hybrid extends a Ridge form upwardly through Inlet, basin and most of outlet as a thin wall Partition (57) FESD manger, dividing one conduit into a dual conduit apparatus. Said Partition and Ridge conduit basin-outlet makes up about same narrow breach of cross-sections lower area sides and raises lowest surface PPLD(s). A Partition about hemispherical cutout (62) topside a basin lowest surface PPLD rounded form partially avoids said PPLD form at one end and extends toward basin blind side clears said PPLD form with its other end. A Partition divides cross-sections area breadth into parts upright plane aligned basin-outlet lower surface PAP(s) PPLD(s) symmetry symmetric. A rounded window cutout (59) through said Inlet uppermost part of said Partition allows full breadth of its Inlet cross-sections two equal parts. Said Partition makes up said two conduit apparatus by including Inlet wall, "infant boot" End 2, and Fin as parts of Partition wall which ends with a Fine edge Ridge extends from outlet descending spout PPLD extension diagonally to a

Fin uppermost edge. Globose Sidelong hybrids of Circumferential Embodiments constitute upright surface side view PAP linear with a PAP formed upright surface having a PPLD width of band. Pure Globose Partition managers with TD FESD subsequently described are contemplated as embodiment form modes with highest energy. Shown Flush Apparatus are another Application continued.

Fig. 17 cross-sectional View C—C of Fig. 16 invention shows a (57) Partition manager, basin lowest surface PPLD rounded lowest surface shapes elongated longer axis toward outlet with two PPLD widths of band and respective breach about halved from an embodiment not partitioned. A Window (59) and constitutes a passageway through Partition upper Inlet locations. A Window (62) through Partition respective basin lowest surface rounded transition constitutes FESD Partition manager lengths. Partition manger subdivided parts includes said windows, Fin, outlet Ridge, upright Inlet Ridge FESD Fig. 16 shown and Flush Apparatus parts another Application continued.

Fig. 18 basin-outlet springing line as drawn is Fig. 16 Section A—A shown Fin enclosing End 2 "infant boot" (41) both forming said Partition manager (57).

Fig. 19, Fig. 20 and Fig. 21 shows cross-sectional View D—D and D'—D' of Window (62) various fillet counterparts.

Fig. 22 basins about uppermost cross-sectional view shows a basin part about Inlet and previously listed parts including Fin extended from "infant boot" and dome cavity on Inlet either side. Flush Apparatus details shown is another Application continued.

Said domain another preferred Globose Dual Sidelong Embodiment and a Globose Sidelong Circumferential Embodiment Fig. 23 sectional view shows a another FESD Partition manager with an elliptical Inlet Window (59) from an End 1 to proximity of retention free surface "at rest" having rounded fine edge sill (77). A rounded (62) Window is through Partition proximate basin-outlet lowest surface starting location of PPLD grade highest pitch with fillets around opening toward upwardly direction from either side of Partition. A Partition curved ending edge

extends downwardly from a sloping Fin (53) fine edge (260) continues downward but with a slight pitch into summit outlet ascending spout FESD Ridge shape from said FESD Partition. Flush Apparatus details are another Application continued.

Fig. 24 cross-sectional View C—C of Fig. 23 invention shows a (57) Partition manager and basin lowest surface rounded form and rounded surfaces respective PPLD surfaces and respective Window (59) and Window sections.

Fig. 25 and Fig. 26 cross-sectional Views B—B and A—A respectively lower Inlet, upper basin sections show a basin about Inlet previously depicted EESD Fin (53), dome cavity on Inlet either side (50), Partition manager (57) (115), including End 2 elongated (54) nozzles, Inlet double wall inner space.

Said domain another preferred Globose Sidelong Embodiment shown by a cross-sectional view is Fig. 27 shown having an End 2 (59) "boot" form side face (33) and instep height extends from basin blind side into a cross-section gradual rise into summit. A "boot" undersurface and side face respectively, side and top view shown constitute an S shape. Said (75) undersurface gradually narrows its separation to PPLD from rounded lowest form (89) (30) to a rounded "boot" toe (60a) and extend End 2, basin lowest surface FESD for said "boot" length. An upper "boot" surface side view likewise constitutes S form (34) but about flattens into said toe and a short fillet radius feathers into Inlet outside face and upwardly into a Fin form. A Fine rounded Fin (53) edge extends from said toe angled upwardly toward Inlet and to basin upper casing with sections increasing width feathering into Inlet outside face and said "boot". Said "boot" and upper (51), inner (50) surface of doming basin blind side cavities on both sides of an Inlet make FESD(s), basin lowest PPLD surface rounded form, upper basin counterpart forms, respectively.

Fig. 28 shows cross-sectional View C—C Fig. 29 located showing "boot" undersurface (59) narrowing into a toe (60a), Inlet's inside face (115) outside fillet (583), and outside face instep (548).

Fig. 29 cross-sectional View A—A of Fig. 27 basin-outlet springing line shows "boot" sides surfaces instep (548) curved S shape, said Fin (53) form which feathers into Inlet outside face.

Fig. 30 shows horizontal cross-sectional View B—B through said "boot" (59) about Inlet inside basin.

Said domain yet another preferred Globose Centric Offset Fig. 31 shows Embodiment (10b) Inlet entirely submerged End 2 extending to basin blind side with a Bridging wall (101) FESD makes inside fillet joints both ends and both sides of said wall symmetric and PAP upright plane aligned. Globose basin cavity makes a low height truncated centric spherical figure upper retention wherein free surface "at rest" is penetrated by rounded Inlet and said Bridging wall connected to basin constituting a Centric Offset classification. Said basin-outlet conduit spout basin, Inlet about centric slightly offset with ascending outlets spout cavity retention PAP angle of 110 degrees. Said Bridging wall forms a smooth outwardly curved line Fine edge lower end (103), enlarges in width and thickens as it rises, and passing upper retention feathers into Inlet outside face having basin blind side upper half dome casing. Said doming basin casing (50) and a Bridging wall form domed cavity (51) on either side of Inlet. This embodiment's PPLD originates from an upper surface of an access portal Plug (107) as a basin surface lowest area round form with height separation from and Inlet centric part offset by a lower surface into an ascending outlet spout said PPLD (7) and First End (83) surface inflection. Said basin lowest surface and End 2 "infant boot" form a FESD. Said PPLD slanted S form centric length (47) grade highest pitch shows angle of 50 degrees. Said portal is sealed with a gasket (105) and provides access to entire basin, Inlet, and part of outlet. Said Plug provides for a bar like (107) handle.

Fig. 32, Fig. 33, and Fig. 34 respectively show cross-sectional View A—A, View B—B, and View C—C of Inlet, basin blind side an upper, intermediate, and End 2 section of Bridging wall (101) with dome cavities (51) on either side and a Fine edge lower end (103).

Said domain another preferred Centric Offset Inlet embodiment double wall space lowest end drains through a basin Bridging wall short length tube (219) to a weep hole. Said portal plug upper surface includes a conical (29) concave surface shape extends upwardly into Inlet as basins lowest surface counterpart FESD, matching a lower Inlet and an End 2 "infant boot". Said conical shape surface extension into basin lowest surface Inlet centric with inside annular circumference of a PPLD annular shape under "infant boot", is yet another profile viewed shrunk PPLD S form PAP upright plane aligned symmetric. Globose basin cavity makes a low height centric part of a truncated spherical figure as upper retention an Offset Inlet typical form. Said PPLD basin lowest surface shows annular valley (30) entirely rounded sides. Said valley about basin blind extends into an upper basin surface half dome form (50) and respective dome cavities. Said conical shape includes a major nozzle tie-in to an independent Flush Apparatus another continuation Application specified.

Fig. 32, Fig. 33, and Fig. 34 View CCC—CCC, C—C, CC—CC are respective View A—A, View B—B, and View C—C identical.

Said domain another preferred Centric Offset Embodiment (10b) Fig. 35a shows a basin lowest surface conical shape (29) upwardly extends into Inlet from a basin pitched upwardly surface from lowest surface (89) rounded valley side into said basin blind side forming a PPLD (7) crescent form. Said "infant boot", basin lowest surface form FESD. Said conical shape concave surface Inlet none centric located closer to said basin blind side is PAP aligned upright plane symmetric. A conical shape PAP aligned and symmetric various basin, Inlet breach (44) and inclinations extending into a basin lowest surface valley are contemplated.

Said domain another preferred Centric Offset Embodiment Fig. 36 (10b) shows a basin half gable roof (115a) assembly shape FESD SM slanted lower end curved about horizontal extending into outlet. Said FESD SM cross-sections include said roof undersurface, topside, and on sides cross-sections areas having an air and transport fluid medium entrapment enclosure with a two way air release

nozzle (54) (119) about said roof uppermost surface. Said enclosure is supported of Inlet outside face PAP upright plane aligned symmetric, extends into basin-outlet, and uses upper basin space, which otherwise is disadvantageous or detrimental. Said assembly constitutes rounded edges structure.

Said domain another preferred Centric Offset Fig. 37 cross-sectional view shown Embodiment (10b) constitutes an assembly of previously described shape of upper retention cavity, Fin, Bridging wall, "infant boot", and access portal plug conical form FESD(s). Said Fin enlarged form encloses an "infant boot", but hollowed out and undersurface removed passed its tip is an FESD SM another preferred air, transport fluid medium entrapment structure.

Fig. 38, Fig. 39, and Fig. 40 respectively show cross-sectional View CCC—CCC, View C—C, and View CC—CC of Inlet, basin, Bridging wall (101) an upper, intermediate, and End 2 sections with dome cavities (51) on either side and a Fine edge lower end (103) and Fin (53).

Said domain another preferred is Fig. 41 shown cross-sectional view of a Centric Offset Embodiment entrapment enclosure hip roof FESD SM (115b) similarly located as previous FESD SM and having a roof section toward outlet summit with a smooth rounded cutout which resembles a dormer (118) window. Another End 2 FESD form shows Inlet outside face toward basin blind side having a fine (78) pointed end.

Fig. 42 shows a front view of said FESD SM (115b) and said nozzle (119).

Fig. 43 shows a staggered sectional view through Fig. 42 embodiment and a top view of said hip roof FESD SM top view said cutout (118) and nozzle (119).

Fig. 44 shows a bottom view of an "infant boot" FESD with three nozzles.

Fig. 45 shows Section BB—BB of nozzle (54) (194) short diffuser funnel shape (131) delays air entering into said enclosure delaying a transporting fluid release trapped in said enclosure leaving wherein longer larger funnel shape (130) delays fluid entering. Respective longer, shorter funnels delay air, fluid egress out of an entrapment enclosure.

Said domain another preferred is Fig. 46 shown cross-sectional view of a Centric Offset Embodiment entrapment enclosure FESD SM (115c) extends from Inlet outside diameter, clears an "infant boot", and as a half cylinder having a Fin shaped profile extends into outlet and basin-outlet upper surface. Said FESD SM enclosures two-way nozzle (119) has a close to Inlet uppermost location. Said half cylinder shape faces summit with enclosure cylinder surface form cutout for full width from its Fin shaped profile tip to its base, with End 2 nozzles unobstructed view toward outlet through said cutout.

Fig. 47, Fig. 48, and Fig. 49 show cross-sectional View CCC—CCC of Inlet, basin and outlet part, View C—C, and View CC—CC of Inlet, basin part, and Bridging wall (101). Said views further show an upper, intermediate, End 2 sections of said Bridging wall with dome cavities (51) on either side of Inlet and intermediate and lower section of Said FESD SM respectively Fig. 47, Fig. 48.

Said domain yet another preferred, Globose Centric Embodiment (10c") Fig. 50 basin cavity, Inlet centric constitutes basin and Inlet respective retention free surfaces "at rest" about centric. Basin upper cavity retention largely a low height truncated spheroid centric part and End 2 flared undersurface width of band and basin lowest surface PPLD wide annular (7) form and previously described conical shape are about centric. A PAP angle of about 127 degrees is increased from its previous 105 and 110 degrees. PPLD shrunken S form centric inflection surface of very short height constitutes ninety degrees angle. An oversized outlet spouts and upper basin counters siphoning action. Said basin upper space includes a Disk form (115d) FESD angled toward outlet summit Fig. 55 shown uppermost surface, rounded curvature on sides matching basin sides separation, and a lower end with a rectangular rounded corners low height cutout (118). Said embodiment and Disk are PAP upright plane aligned symmetric.

Said domain another preferred Globose Centric Offset Embodiment (10b) Fig. 51 shown Inlet flared End 2 (79) constitutes a basin upper retention cavity largely a low height truncated spheroid centric shape slanted upwardly from outlet

as a slanted truncated cylinder form. Outlet ascending spout rounded lower surface is likewise extended upwardly along with said basin cylinder forming truncated basin-outlet merged cavity extending upwardly as largely ellipsoid surface extending into said basin largely cylindrical surface. Said ellipsoid to cylinder transition surface includes a surface portion of an intermediate size cylinder with rounded transitions among them. A cylindroid and intermediate cylinder merged surfaces composite is slanted S-form curved surface truncated from outlet summit extending into said upwardly slanted cylindrical form upwardly extending portion. A slanted (34a) surface is pitched upwardly from summit around said cylindroid, cylinder surfaces forms a channel about them which as one sided Trough (34a), makes an enclosure about them extending upwardly as cylinder shape into basin-outlet upper casing. Said channel with lower surface a rounded side Trough shape about embodiment basin casing oversized outlet ascending and descending spouts avoids siphoning. This globose Centric Offset embodiment includes said globose retention shrunk PPLD S form with centric grade (47) highest pitch of 62 degrees and slanted form PAP (71) angle of 113 degrees aligned upright plane symmetric. PPLD ascending spout slant offsets annular valley PPLD form constituting a Centric Offset basin, Inlet alignment. Upwardly slanted surface constitutes from summit an outlet FESD first (85), second (86), third (87) sub-outlet DCSS and said channel (34a) providing an alternate path about basin-outlet. Said view further shows a fillet flared End 2 (79) and a rounded apex (29) FESD respective counterpart centric offset annular PPLD and valley (3) sides.

Fig. 52 is cross-sectional topside view of DCSS Partition, Ridge, Trough form around basin-outlet of Fig. 51 and further shows outlet spout orthogonal basin-outlet cross-sections constituting outlet spout area as a globose form lower area of a preferred Trough.

Fig. 53 and Fig. 55 show topside of Fig. 54 embodiment and front view Section A—A of FESD Disk (115d) uppermost (127) surface, rounded curvature

on sides (126) matching separation from basin sides, and a lower rectangular rounded corners low height cutout (118). Said views further show an upper, intermediate, End 2 sections of said Bridging wall with dome cavities (51) on either side of Inlet and intermediate and lower section of Said FESD SM respectively Fig. 47, Fig. 48.

Said domain another preferred Globose Centric Offset Embodiment (10b) Fig. 54 shown includes an oversized outlet ascending spout (12) elliptical upright major axis First End extending from a respective basin, and a descending spout narrowing into a rounded Exhaust, which avoids siphoning action. Basin space includes said Disk (115d) FESD, basin-outlet PAP of 110 and a respective shrunk PPLD grade highest pitch of 62 degrees, basin-outlet outlet grade pitch orthogonal cross-sections preferred globose shape cross-section constituting a lower surface outlet spout as a Trough. Said outlet spout basin-out cross-sections area forms constitute a typical preferred globose.

Fig. 56 shown as a cross-sectional view of a FESD manager (130) (115) extending a full height of Inlet into a Basket, Strainer (457) and a basin lower surface rounded sides (3) lowest annular inside surface (30) PPLD counterpart of prior embodiment flared End 2 among others.

Said domain yet another preferred Cylinders Centric Embodiment (10c) Fig. 57 shown includes a rounded about upright basin and Inlet centric PAP PPLD upright plane aligned basin-outlet lower surface symmetric. An outlet FESD First Sub-outlet (85) lowest surface forms rounded short radii outside fillet about and a rounded lowest surface narrow breach DCSS area part and PPLD short curvature into an outlet highest section summit. Said fillet constitutes ascending spout. Similar or shorter radii fillet forms a basin outside face outlet descending spout. Said summit rounded lower surface narrow breach is of a section height which is at least a low integer multiple of PPLD width of band. Said DCSS cross-section form topside and about basin casing from said breach makes a smooth counter curvature into low upwardly pitch slants toward a basin blind side constituting a

large Second Sub-outlet (86) curved surface part and unusually large a Third Sub-outlet (87) slanted surface part. Embodiment basin's lower surface FESD includes a conical (29) shape extending into Inlet as a FESD manager with a narrow width PPLD annular form. Said PPLD (7) annular basin lowest surface wide shape S form curved lower part extends upwardly having a basin curved transition into upright surface toward said PPLD narrow width of band length through First Sub-outlet summit as embodiment narrowest. Said PPLD length forms intersection with PAP which upright plane aligns PPLD upright length with basin, Inlet lower surface symmetric. A channel (35a) with rounded lower surface resembling a Trough extends around upper basin pitched upwardly toward a basin blind side prior embodiment described with a lower end not at summit level but extended into an outlet oversized descending spout conduit toward Second End. Said channel other forms are embodiments contemplated. Said oversized outlet conduit descending spout extends to a vent line if needed for avoiding siphoning action. Said basin-outlet conduit spout shape constitutes upper retention cavity, Inlet and said basin lowest PPLD surface about centric. Fine rounded End 2, basin lowest valley surfaces (30) (3) are FESD respective counterparts. Rounded End 2 undersurface, a flat or slightly doming annular valley basin lowest surface entirely under said undersurface are respective FESD counterpart surfaces and sustain cross-sections height and PAP PPLD separation under End 2. A portal Plug upper surface includes a conical shape upwardly extended into Inlet as basins lowest surface FESD, lower Inlet and End 2 counterpart. Said PAP angle of 148 degrees and PPLD S form centric segment length 90 degrees pitch is upright plane align and PAP symmetric Inlet, basin-outlet. Said conical shape about basin lowest surface Inlet centric inside annular circumference of a PPLD annular shape under rounded End 2 is yet another profile viewed shrunk PPLD S form. Previously described Inlet double wall space lowest end is provided with a short length drain tube through retention and into basin blind side outside face drip hole.

Said domain another preferred Globose Cylinders Centric Embodiment meeting five globose requirements of basin-outlet upper cavity retention is Fig 58 shown. Except for a basin lowest surface constituting a flat circular or a slightly doming surface wide width annular PPLD form, embodiment is prior embodiment identical. Fine rounded End 2 and basin sides to lowest surface (30) are FESD respective counterparts. Shrunken PPLD S forms are a basin-outlet lowest surface least length from End 2 under facing outlet and basins lowest surface pitched downwardly toward outlet are contemplated. Said DCSS FESD slanted channel Trough and particularly with a similarly pitched basin lowest surface qualify this embodiment into said globose domain. Breach (44) from Centric to a Sidelong Lineage is also contemplated, and Fig. 35a shown.

Said domain another preferred Globose Cylinders Centric Embodiment (10c) satisfying said Globose basin-outlet upper cavity retention five requirements Fig. 61 shows with conical form identified further enhanced with a cylinder basin, outlet outward spout First End from about an empirical retention mid height. Said outlet spout lowers said PAP angle from 148 to 140 degrees. Embodiment change from one Fig. 57 shown includes said First Sub-outlet spout basin-outlet DCSS front view Fig. 64 shown with said spout lip thickness (135a).

Said domain another preferred Globose Cylinders Centric Embodiment Fig. 62 shown satisfying Globose basin-outlet upper cavity retention five requirements prior embodiments similar but enhanced with an outward ascending spout, an Inlet FESD manager (115) Flush Apparatus subsequently further addressed (another Application continued). Said manager extends as a basin conical form entirely sustaining a basin lowest surface valley rounded form space about a centric similarly rounded End 2 counterpart shape sustains Inlet space separation through empirical retention "at rest" height. Extended further upwardly said FESD (431) manager gradually diminishes said space volume with sustained change with height to reverse abruptly said space volume change with height extending to a rounded apex (29) of a conical shape. Said space volume change reflects a depth

and volume of an Inlet cavity and is coordinated with a basin-outlet cavity surface retention shape, volume depth and coordinated with an outlet FESD DCSS area shape and depth. Said cavity depth volume surface retention settings constitute an ability to predict discharged waste particles size specific gravity.

Fig. 59 and Fig. 63 show top view of Fig. 57, Fig. 58 and Fig. 61, Fig. 62 respectively.

Fig. 60 and Fig. 64 show from view of Fig. 57, Fig. 58 and Fig. 61, Fig. 62, respectively.

Said domain yet another preferred Globose Cylinders Centric Embodiment (10c) Fig. 65 shown outlet ascending Arching Spout includes a rounded End 2 and a basin lowest surface similarly rounded annular valley counterpart entirely under End 2. Basin and Arching Spout (12) cavity empirical retention satisfy said five Globose Cylinders requirements. Said First End (83) upper surface extending into upper casing constitutes a high relatively narrow basin. An outlet First End oversized upright elliptical cross-section curved spout into a rounded Second End Exhaust constitutes construction installation best mode and ease of fabrication. Said basin, elliptical First End into a DCSS downward spout into a round Second End Exhaust and increased height of basin-outlet upper cavity area constitutes a classification change from a large DCSS Globose Cylinders. Said Embodiment warrants an anti siphoning action such as a First End large elliptical Arching Spout cavity retention and a DCSS various summit FESD are contemplated. Said PPLD profile shrunk S form consists of said annular valley rounded outer side lower S form (3) curvature, a centric part very short upright length or a surface inflection only, and S form arching gradual slope change upper part. Said spout breadth and PPLD width of band remain unchanged into Second End Exhaust. Narrowing of said spout from a wider First End is likewise contemplated. A PAP (71) angle of 140 degrees establishes a slant of said S form. PAP tangency locations with rounded End 2 and PPLD width of band are introduction to embodiments described. This embodiment includes a conical shape (29) rising into Inlet beyond

rounded End 2 as FESD from a basin valley similar rounded shape lower surface annular inner side and a Cap around a basin cylindrical lower end which provides portal access prior embodiments described. Breach (44) from Centric to Sidelong Lineage is contemplated including pitched basin lowest surface Fig. 35a shown. A double wall with narrow inner space extending around Inlet lower length part and inside basin and an inner space lowest end with a downward short tube through a wall toward outside to a drip location prior embodiments shown is contemplated.

Said domain another preferred Globose Cylinders Centric Embodiment (10c) Fig. 66 shown outlet ascending Arching Spout as with Cylinders Centric embodiment constitutes a basin lowest surface flat and slightly doming PPLD respective circular and wide width annular surfaces. Shrunk PPLD S form lower part rounded (3) shape extended around said basin is entirely matched by End 2 outside face fillet.

Said domain another preferred Globose Cylinders Centric Embodiment outlet ascending Arching Spout transfers into an Offset and Sidelong respective Flush Apparatus (10) major nozzle conical form (29) is subsequently addressed.

Fig. 68 shows top view of embodiment Fig. 66 shown and is likewise top view of embodiment Fig. 65 and 67 show except for said basin lowest surfaces conical shapes instead of flat about doming surfaces Fig. 66 shows.

Said domain yet another preferred Globose-Inverse Cylinders Centric Embodiment (10c') Fig. 69 shown constitutes a treaded Inlet opening enlarging into a cylindrical Inlet which extends into a basin cylinder. This embodiment includes a conical shape (29) rising into First End from a basin valley rounded lower surface annular inner side (3) and a Cap (104) handle (107) and a basin valley outer side (3) around cylindrical lower end providing a portal access previously described. A First End entirely submerged centric inside globose cylindrical upper cavity empirical retention ascends an arching outlet spout form penetrating through said Inlet, basin cylinder. Said arching spout length inside said basin includes a double wall (118) inner space prior embodiments Inlets

utilized and thereto described. Gradual decreasing slope from said rising spout First End makes a summit (84) and extends into a descending spout Second End Exhaust. Shrunk smooth briefly discontinuous and highly compacted short height and length S (7) and C (7) PPLD forms constitute conduit spout. Said S form upper curvature shape and lower curvature basin-outlet annular rounded valley widths of band under First End S form and very short C form make up lower PPLD shape profile. About centrically rounded First End and a valley rounded lower surface FESD counterparts about sustain surfaces respective separation and cross-sections area. Said embodiment conforms to requirements for globose cylindrical cavity empirical upper retention. Outlet spout cross-sections contains embodiment narrowest breadth and a PPLD width of band and a DCSS breadth and width of band narrow or narrowest. Said spout is shown of uniform sections. Elliptical sections major axis upright, various outlet FESD, and outlet cross-sections are contemplated preserving said breadth and PPLD width of band requirements. Such outlets are shown with embodiments previously described. Said PAP tangency with First End undersurface and PPLD width of band shows an angle of 131 degrees. From Centric to Sidelong Lineage Breach (44) is contemplated including pitched basin Fig. 35a shown. Said transfer is as described for Globose Centric Embodiments shown having a Flush Apparatus, also. A double wall with narrow inner space (118) extends around First End lower length part inside basin and an inner space lowest end with a downward short tube (219) through a wall toward outside. A drip from said tube constitutes an immediate sounding alert.

Said domain another preferred Globose-Inverse Cylinders Centric (10c") Embodiment Fig. 70 shown constitutes a basin lowest surface flat or slightly doming respective circular or wide width annular area surfaces respective shrunk PPLD S and C shape and a rounded First End. Shrunk PPLD S form lower rounded S part shape around said basin (3) is matched by First End outside face similar rounded shape fillet.

Said domain another preferred Globose-Inverse Cylinders Centric (10c") Embodiment Fig. 72 shown transfers into an Offset and Sidelong respective Cylindroid drain trap forms. A Breach change described previously transfers Lineage, Flush Apparatus included as various apparatus shown.

Fig. 71 shows top view of embodiment Fig. 70 shown.

Said domain yet another preferred Globose Cylinders Centric Embodiment (11a) Child Application Fig. 77 herewith Fig. 73 shows embodiment inside a drain line fitting together constituting a floor surface. A funnel like upper (109) Inlet extends into a rounded Inlet with a flat End 2 undersurface and submerged centric inside a basin-outlet cavity empirical retention. Supported by a gasket (105) on a blank flange of said drain line fitting Inlet End 1 grating (151) is treaded into place utilizing said fitting inside tread. A basin-outlet bowl like form is hung from said Inlet constituting a generic form of basin-outlet spout having upper casing rim formed DCSS about basin outlet except for a basin upwardly extending blind side hanger and (177) bracket extending about an Inlet outside face. Said bowl from a basin lowest surface forms (110) a broad rounded surface said cylindrical basin sides and a PPLD smooth, shrunk S form outlet ascending spout, embodiment and spout ending narrowest width of band and rounded lower surface breach. Said bowl upper end extends upwardly from said summit (84) making a rounded side view appearance constituting a First Sub-outlet (85), extends horizontally a (86) Second Sub-outlet and angling upwardly toward said hanger a Third Sub-outlet (87) DCSS about Inlet. Basin lowest surface includes angular upwardly conical form extension with apex (29) End 2 centric. Said conical form annular PPLD width of band and End 2 flat undersurface constituting respective counterparts. Said domain preferred Globose Cylinders Centric Embodiment floor drain trap transfers into an Offset and Sidelong respective Cylindroid drain trap forms. Said transfer is as described with Globose Cylinder Centric Embodiments.

Fig. 74 shows top view of embodiment Fig. 73 prior applications and Child Application Fig. 76.

Fig. 75 Globose Sidelong Offset Embodiment (10a) top view of Fig. 78 shows a TD FESD SM (454) manages space of basin-outlet. Said parts make up a Nozzle (454) assembly. Suction part constituting an elongated intake orifice, prior application shown similar form about said End 2, a curved elongated nozzle basin orifice (37a) and it's fillet with an upper basin surface. Said orifice to a nozzle (130a) throat an (37b) elongated nozzle topside about basin, an outlet orifice (37), spout (37c) nozzle form (130) and its rounded fillet with outlet descending and ascending spouts upper surface. Said basin, outlet orifice screens (89a), (89d) are of sufficient structural strength, retained with a cover, a cover (91b), (89c) plate spiral screw (91), and spiral screw (91a), respectively. Said spiral screws tighten said plates and gasket with a quarter turn having a range of one turn. Said FESD SM further constitutes inside basin a FESD Disk (115) form extending across upper basin having centric lower end rounded cutout (117). This embodiment without TD FESD SM with GC cross-sections extending through outlet summit forming a large globose form upper area Sub-outlet three is likewise contemplated.

Fig. 76, Section A—A, shows top view of a two directional FESD (10abc) and constitutes basin lower retention cavity Fig. 78 Sidelong Offset Embodiment with FESD SM shows. Said two directional preferred (TD) FESD (10abc) reorients a basin cavity lower retention interface of a basin-outlet spout, Inlet conduit three directional surfaces into a conduit spout lower surface two directional surfaces. Said FESD TD, likewise contemplated with Centric, extended upwardly constitutes a basin blind side and an Inlet upright vein Ridge. A Ridge (55a) fine rounded edge slopes downwardly from both sides of an arching peak about a basin blind side. Following a basin perimeter under, about an End 2 both Ridge ends gradually negotiate a linear form from former circumferential path and fade into a Trough shape narrow breach of an outlet ascending spout narrow or narrower breach about a First End of rounded lowest surface cross-sections. A Trough (34b) along Ridge outside face and about basin perimeter slopes and fades together with said Ridge, PAP upright plane symmetric. A

centric Ridge (55c) of a narrow fine edge and downwardly decreasing slope sides rounded transition basin lower lowest surface ends within immediacy of or forms a basin rounded PPLD (89a) or PPLD(s). A Ridge may extend as basin or basin-outlet, or an Inlet Ridge. Said Ridges (55a), (55c) PAP aligned upright plane symmetric intersect wherein said centric Ridge edge widens near its peak about a top Trough rounded edge and arches along with said circumferential Ridge toward arching Ridges intersecting peak (84p). Said top Trough constitutes an uppermost of a Trough set wherein its rim centric segment arc (57) is under said circumferential Ridge, Trough, with each Trough slightly undercutting higher Trough. Said Ridges constitute a merging intersection of said widened sides and circumferential Ridge edge, forming a common arch and peak wherein differing slopes and peaks are contemplated, also. Said widened set of Troughs' sides constitute stair risers and sloping treads horizontally arching on either side of said centric Ridge upright plane PAP aligned symmetric. Risers interrupt continued surface areas and sequentially form a confining set of slanted and about upright surfaces, and constitute a selected breach for each Trough. Said horizontal arches' (30b, c, d, g, r) Troughs successively narrower breaches converge into a basin lowest surface PPLD form under an End 2 perimeter increment facing outlet with one set Trough ends forming said narrow fine centric Ridge edge. Said Troughs set other ends fade into basin rising lower surface sides. Successively narrower breach of said treads merge into a narrow breach of deepest Trough and PAP upright plane symmetric started PPLD shrunken S form and one Trough cross-section basin outside face shaped (30g) appearance shows. A TD FESD flared End 2 narrowly increasing separation from said circumferential Ridge, Trough extends (41a) toward an outlet DCSS topside narrowed breach of a PPLD S form width of band counterpart segment initiating a PAP PPLD separation. Said lowest Troughs merge ending centric Ridge under Inlet. Said risers constitute preferred square (11) widows enclosure of nozzle (314a) orifices directed toward opposite face of said riser arced surface and a short path under End 2 with a horizontal and

upright direction range various fit with preferred windows frame. An extension of said centric Ridge into basin-outlet and Partition FESD manager is prior embodiments depicted. A set of Troughs' risers and treads arced, rounded, elliptical, parabolic forms about a basin blind align a PAP with a PPLD widths of band midpoint as purely globose and a widths of band and PAP having an upright plane a Globose Circumferential Embodiment hybrid. A purely Globose Embodiment Ridge and Partition FESD(s), TD FESD PAP aligned is contemplated having part or entire basin-outlet. Likewise a TD FESD with a circumferential Ridge and only one set of Troughs about a basin blind side fading into a narrow cross-section First End is contemplated. A Globose Partition and a TD FESD form a highest energy mode. Said TD FESD circumferential Ridge with Trough is contemplated without stack Troughs with or without a centric Ridge.

Fig. 77, view B—B, shows TD FESD cross-section Fig. 76 depicted narrow breaches and breadths of successive Troughs showing lowest Breach (44a) lowest Trough (30a) among depicted Troughs on either side of Ridge (55c) head for a basin lowest surface Trough cross-section rounded spot. TD Trough by itself or along a FESD Ridge and Partition manger length and basin-outlet entire length is contemplated within entire domain along with embodiments Troughs depicted. Said TD FESD circumferential Ridge with Trough is contemplated without stack Troughs with or without a centric Ridge.

Fig. 78 PAP upright plane aligned cross-sectional view of Fig. 76 depicted Sidelong Offset (10b) Embodiment shows parts of a FESD SM basin orifice (37a), a basin (130) an outlet (37c) nozzle and a throat (130a), and a basin an outlet respective orifice screen (89a) and (89d). This Embodiment basin lower surface constitutes said TD FESD Fig. 76 and Fig. 77 depicted; and a conduit spout outlet First End, a basin-outlet narrow width of band, and a shrunken PPLD S form ascending spout into a summit DCSS narrow or narrowest PPLD width of band. Said PPLD widths of band constitute a horizontal segment of a rounded lower surface perimeter having a respective breach. Said TD FESD includes preferred

widows square shape of nozzle orifices and tie-in to a Flush Apparatus mainly another Application continued. A double wall inner space prior Figures depicted includes an Inlet outer wall, basin wall drip location. This embodiment without TD FESD SM with GC cross-sections extending through outlet summit forming a large globose form upper area Sub-outlet three is likewise contemplated. Said TD FESD circumferential Ridge with Trough is contemplated without stack Troughs with or without a centric Ridge.

Fig. 79 shows Sidelong Embodiment (10a) upright plane aligned cross-sectional view of said TD FESD. Embodiment circumferential Ridge (55a) starts from either side of Inlet, basin blind side common surface said arching peak of said circumferential Trough (34a) Ridge (55a) and extends under a Doming cavity. Said ridge arches into a common centric peak (55d) PAP symmetric. Other parts are Fig. 78 similar and are presented herewith as examples of Sidelong and Sidelong Offset Embodiments depicted differences wherein TD FESD and FESD SM are contemplated with other embodiments of said domain. Said range of at least one of square widows nozzles constitutes an unobstructed direction toward a Trough transition into circumferential Ridge arch about basin blind side. This embodiment without TD FESD SM with GC cross-sections extending through outlet summit forming a large globose form upper area Sub-outlet three is likewise contemplated. Said TD FESD circumferential Ridge with Trough is contemplated without stack Troughs with or without a centric Ridge.

Fig. 80 prior and Child Applications Fig. 89 shows a kidney shaped FESD First Sub-outlet (85), Second or Intermediate Sub-outlet (86), and Third or Major Sub-outlet (86). Said FESD is shown in various forms with various embodiments, suitable, and characteristic basin globose form and conduit shape ascending basin-outlet cross-sections and transport medium, transported waste mixture a conduit preferred form.

The description and drawings merely explain and illustrate inventions. Invention are not limited to embodiments shown, as those skilled in the art who have a disclosure before them will be able to make modifications and variations therein without departing from the scope of the invention, with PPLD, grade highest pitch, figures shape, PAP about as shown.

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